

criticized during the rulemaking process. One criticism was that it effectively required employers to continue to implement controls when the risk posed by a certain job was no longer "significant." Although OSHA does not agree that the process placed requirements on employers to act where there was no significant risk, OSHA has nonetheless eliminated the requirement from the final standard in order to, among other things, avoid any implication that employers must abate hazards that are not significant.

Some commenters argued that OSHA improperly relied on the BLS data for its significant risk analysis because the data include injuries and illnesses that are only 1% caused by work. See Ex. 32-78. These commenters miss the point about OSHA's significant risk analysis. The appropriate question to be asked is whether the BLS data accurately reflect the risk faced by workers exposed to the risk factors being regulated and whether the standard will substantially reduce that risk. As explained above, the BLS data represent the best available evidence on the magnitude of the MSD problem in the United States today, and thus on the significant risk faced by workers from exposure to the ergonomic risk factors at issue. The BLS survey is a comprehensive one; it collects workplace injury and illness data from about 165,000 private industry establishments. For the survey, selected employers are required to provide statistics on the total number of injuries and illnesses recorded on the OSHA Form 200, as well as information describing the nature and causes of their lost workday injuries and illnesses. The information is provided in sufficient detail to permit BLS to systematically code each reported case and develop estimates of the numbers and incidence of each specific type of LWD injury and illness for the United States as a whole, by industry sector and by occupation. The data provided reflect the employer's understanding of which cases are work-related under current U.S. Department of Labor recordkeeping guidelines. OSHA is thus confident that the reported cases of MSDs included in the significant risk analysis accurately reflect injuries caused by work.

OSHA has also taken a number of additional steps to ensure that the risk assessment and the significant risk analysis have a tight nexus with the risk factors being regulated and the structure of the standard. As stated, OSHA only included Nature of Exposure Event categories in its risk assessment that corresponded to the risk factors targeted by the standard. Thus, the MSDs experienced by workers as a result of

exposure to risks not covered by this standard are not included in the Risk Assessment. In addition, for the final standard OSHA has conducted a second, alternative analysis that eliminated from the risk assessment MSDs caused by exposure to risk factors at levels below the screen. See Risk Assessment discussion. This additional analysis confirms OSHA's conclusions as to the risk faced by workers exposed to the risk factors at issue and demonstrates that the risk of developing MSDs for workers exposed to risk factors at levels meeting the screen is alarmingly high and, without question, significant.

One commenter argued that OSHA has improperly considered "significant" risks that represent incident rates much lower than those being targeted in the Agency's new enforcement plan. Tr. 10439 (NCR Corporation). The OSH Act and past OSHA practice provide the framework within which OSHA must make its significant risk finding. Acting within this framework and on the best available evidence, OSHA has found that a significant risk of material harm currently exists for workers exposed to the hazards regulated and that the standard will substantially reduce that risk. OSHA's enforcement strategy, on the other hand, is based on entirely different principles. Because OSHA has a limited enforcement budget, OSHA targets its enforcement activities to industries where the risk of harm is particularly severe. OSHA engages in comprehensive data collection in order to determine where certain industries fall within this prioritization scheme. OSHA's most recent enforcement initiative focuses on relatively large workplaces whose past experience shows that hazards are likely to be present. The principles used to support OSHA's enforcement efforts are very different from the principles OSHA must abide by in setting occupational safety and health standards. For this reason, it is entirely appropriate for OSHA to apply different standards for determining significant risk and targeting its enforcement activities.

#### *D. Conclusions*

OSHA concludes, based on the evidence discussed above and elsewhere in the record, that the scientific data are sufficient to demonstrate that exposure to work-related risk factors is associated with the development of musculoskeletal disorders of the upper extremities, back, and lower extremities. Risk factors identified from this body of literature include repetitive motions; use of excessive force; segmental vibration;

maintaining awkward postures of the neck, wrists, arms, trunk, and lower extremities; and lifting, lowering, pushing, carrying, and pulling loads of excessive weight. Depending on the specific combinations of risk factors encountered in the workplace, musculoskeletal disorders identified as being work-related include carpal tunnel syndrome (hand, wrist), trigger finger (hand), De Quervains' disease (wrist), tendinitis (hand, wrist, shoulder, ankle), epicondylitis (elbow), rotator cuff tendinitis (shoulder and neck), sciatica (lower back), osteoarthritis (hip, knee), bursitis (knee), and tarsal tunnel syndrome (foot).

The evidentiary base on which OSHA relies in making these conclusions is described fully in the Health Effects section of the preamble. This evidence is comprised of several hundred cross-sectional, case-control, prospective, and case series reports of working populations in a variety of industrial settings. Supplementing these reports is a large body of scientific literature that provides data on the mechanisms by which exposure to these risk factors causes musculoskeletal disorders; these data demonstrate the biological plausibility of the relationship between exposure to workplace risk factors and an elevated risk of MSD injury and illness.

MSDs have been recognized as compensable under virtually all State workers' compensation plans, demonstrating that exposure to work-related risk factors is already widely recognized as a cause of musculoskeletal disorders. Taken together, OSHA believes that the scientific and other evidence described in the preamble to this rule constitute an evidentiary base of unusual depth and quality.

Accordingly, OSHA concludes that musculoskeletal disorders associated with workplace exposure to workplace risk factors constitute material harm under the OSH Act. Further, as demonstrated by the evidence discussed in Section B above, the data available to the Agency demonstrate clearly that workers in the occupations and industries covered by the ergonomics program standard are at significant risk of experiencing a work-related MSD over their working lifetime; for many occupations and industries, they are at significant risk of experiencing a work-related MSD even in a single year of work in their job.

## VIII. Summary of the Final Economic Analysis and Regulatory Flexibility Analysis

### A. Introduction

OSHA's Final Economic and Regulatory Flexibility Analysis (Ex. 900) addresses issues related to the costs, benefits, technological and economic feasibility, and economic impacts (including small business impacts) of the Agency's ergonomics program rule. The analysis also evaluates regulatory and non-regulatory alternatives to this rule.

This rule is a significant rule under Executive Order 12866 and has been reviewed by the Office of Information and Regulatory Affairs in the Office of Management and Budget, as required by the executive order. In addition, this economic analysis meets the requirements of both Executive Order 12866 and the Regulatory Flexibility Act (as amended in 1996). The complete Final Economic and Regulatory Flexibility Analysis has been entered into the rulemaking docket as Ex. 900. This Final Economic and Regulatory Flexibility Analysis presents OSHA's full economic analysis and methodology, as well as responses to comments in the record on the Preliminary Economic and Regulatory Flexibility Analysis. The remainder of this section of the Preamble summarizes the results of that analysis.

The purpose of this Final Economic and Regulatory Flexibility Analysis is to:

- Identify the establishments and industries potentially affected by the rule;
- Estimate the benefits of the rule in terms of the reduction in musculoskeletal disorders (MSDs) employers will achieve by coming into compliance with the ergonomics program standard and some of the direct cost savings associated with those reductions;
- Evaluate the costs, economic impacts and small business impacts establishments in the regulated community will incur to establish ergonomics programs to achieve compliance with the standard;
- Assess the economic feasibility of the rule for affected industries;
- Evaluate the principal regulatory and non-regulatory alternatives to the final rule that OSHA has considered;
- Present the Final Regulatory Flexibility analysis for the ergonomics program rule; and
- Respond to the findings and recommendations made to OSHA by the Small Business Regulatory Enforcement

Fairness Act (SBREFA) Panel convened for this standard.

The Final Economic Analysis contains the following chapters:

Chapter I, Introduction  
Chapter II, Industrial Profile  
Chapter III, Technological Feasibility  
Chapter IV, Benefits  
Chapter V, Costs of Compliance  
Chapter VI, Economic Feasibility  
Chapter VII, Economic Impacts and Final Regulatory Flexibility Analysis  
Chapter VIII, Assessment of Non-Regulatory Alternatives.

### B. Introduction and Industrial Profile (Chapters I and II)

Data from the Bureau of Labor Statistics (BLS) *Annual Survey of Occupational Injuries and Illnesses* for 1996 shows that 626,000 U.S. workers across all industries experienced musculoskeletal disorders serious enough to require time away from work for recuperation in that year (Ex. 26–1413). In addition to these lost workday MSDs, OSHA estimates that, on average across all of general industry, about two times as many non-lost workday cases involving work-related MSDs occur every year in U.S. workplaces.

In some general industry sectors, lost workday MSD rates reached 37 cases per 1,000 full-time equivalent (FTE) workers in 1996, and in many others, annual incidence rates were greater than 10 per 1,000 FTE (Ex. 26–1413). If these annual risks are converted into working lifetime risks (assuming a 45-year working lifetime), the risks of experiencing a lost workday MSD faced by general industry employees over the course of their working life, based on OSHA's most conservative estimates, range from 24 to 813 per 1,000 workers, depending on the particular industry in which the worker is employed (see the Significance of Risk section of this preamble). By any reasonable definition, these risks of material impairment are significant. Another indicator of the significance of work-related MSDs to the economy is the fact that employers annually pay out, in direct workers' compensation costs, between \$15–\$18 billion, or about 1 dollar of every 3 workers' compensation dollars, for MSD-related claims.

The extensive evidence available clearly demonstrates that ergonomic risk factors—such as repetitive motion, force, awkward posture, and vibration—are present in all types of general industry workplaces, including small, medium, and large workplaces. In today's workplace, the pace of work, the specialization of work, and continued reliance on unassisted manual handling require many workers to apply

excessive force, perform too many lifts and carries, and repeat similar motions too often. Many studies cited in the Health Effects section of the preamble (Section V) to the final standard demonstrate the presence of these risk factors in the workplace, and many biomechanical studies show the effects on the soft tissues of the body of these external forces: tissue damage, pathophysiology, and outright disease.

Market mechanisms have been inadequate to address these risks (see the discussion in Chapter VIII of this economic analysis). Although many firms, and particularly larger firms, have addressed ergonomic risk factors and substantially reduced their MSD rates, many firms have not. Approximately 60 percent of all general industry employees continue to work in establishments that have not yet addressed ergonomic risk factors, despite the widespread presence of MSD hazards.

Because these characteristics of work are not unique to the United States, countries of every size and on every continent are also experiencing significant numbers of musculoskeletal disorders among their workforces. Many of these countries—ranging from the United Kingdom and Sweden to Pakistan, Ecuador, and South Africa—have already established regulatory requirements designed to address some or all of the workplace risk factors giving rise to these disorders. A table summarizing the ergonomics rules and guidelines issued by other countries and organizations can be found in Chapter I of this Final Economic Analysis.

The standard OSHA is issuing today applies to general industry employers and will also affect state and local government entities or agencies in OSHA's State-plan States, except that the following industries are exempt from the scope of the final standard: agriculture; maritime; and construction. In addition, the standard does not apply to railroad operations.

The final ergonomics rule is a program standard, *i.e.*, one that requires employers whose employees experience MSDs in jobs determined to be higher risk jobs to implement a program that includes the elements of any sound safety and health (ergonomics) program. These include management leadership and employee participation, job hazard analysis to identify musculoskeletal hazards, the implementation of controls to reduce the hazards identified, training for employees and their supervisors or team leaders in jobs that have MSD hazards, management of musculoskeletal disorders when they occur, and regular evaluation of the

program to ensure that it is functioning as intended.

The final rule contains many features that act to target the standard to the most hazardous jobs; to limit the compliance obligations of employers as much as possible, consistent with employee protection; and to permit employers to adapt the required program and its elements to the conditions and circumstances of their particular workplaces. Among the standard's flexible provisions are the following:

- The programmatic design of the standard itself, which requires employers to establish a basic framework with widely agreed-upon elements but leaves employers free to provide many of the establishment-specific details;
- A two-step action trigger, which requires the employer to take action only if an employee has experienced an MSD incident (one involving medical treatment beyond first aid, days away from work or on restricted work, or signs or symptoms lasting 7 days or longer) and that employee's job is determined to involve heightened exposure to ergonomic risk factors;
- A Quick Fix provision, which allows employers whose employees have experienced only a few MSDs to fix the problem job without having to implement the entire program;
- Provisions that specify that the employer is only required to implement a program for those jobs that meet the action trigger, and then only to implement the program in that establishment;
- A provision permitting employers to use a variety of methods to conduct job hazard analysis;
- A provision permitting employers to demonstrate that they have met their hazard control obligations in any one of a variety of ways;
- A "grandfather" clause that permits employers with effective existing programs that contain the basic elements of ergonomics programs and that have been evaluated and shown to be effective before the standard's effective date to continue to implement their programs rather than the program required by the standard;
- Provisions stating that an employer's obligation to maintain its ergonomics program ceases for employees and jobs once the job has been controlled to levels below the screen.

OSHA believes that the flexibility afforded by the final rule will facilitate compliance by employers of all sizes and provide their employees with the protections they need against the

ergonomic hazards that are so prevalent in general industry workplaces today.

The standard being issued today depends heavily on employee reporting for its effectiveness. This is the case because a report of an MSD or MSD signs and symptoms is the trigger to further action by the employer. Once an employee has reported an MSD, or its signs or symptoms, to the employer, the employer must determine whether the MSD (or signs or symptoms) meet the standard's definition of an MSD incident. An MSD incident is defined by the standard as a work-related MSD or MSD sign or symptom that involves persistent signs or symptoms (those lasting for 7 or more consecutive days since the time they were reported to the employer), or that requires medical treatment beyond first aid, one or more days of restricted work, or one or more days away from work. If the employee's report of an MSD is determined by the employer to be an MSD incident, the employer must then move to the second prong of the standard's action trigger: a review of the employee's job to determine whether it involves ergonomic risk factors (repetition, force, vibration, awkward postures, or contact stress) for durations that meet those specified by the Basic Screening Tool in Table 1 of the standard for that risk factor. If the relevant risk factors in the employee's job do not meet the screen in Table 1, the employer is not required to take further action. In other words, unless both parts of the action trigger are met (the occurrence of an MSD incident *and* the presence, in that employee's job, of risk factor(s) meeting the screen), *no* ergonomics program is triggered.

OSHA believes that the action trigger in the final rule is a highly effective targeting device because OSHA's data show that only about 37 percent of all general industry jobs will meet the screen, but that about two-thirds of all lost workday MSDs reported to the BLS annually occur in those jobs. Put another way, the risk that an employee will incur an MSD is about three times greater in a job with risk factors that meet the screen than in jobs that do not have such risk factors.

The standard requires employers who have jobs that meet the action trigger to implement an ergonomics program for that job and for all employees in the same job within the establishment.<sup>1</sup> The program consists of the following elements: management leadership,

employee participation, job hazard analysis, employee training, MSD management (called medical management by many employers) and if a hazard is found—hazard control and program evaluation.

The final rule provides employers with several different hazard identification tools that they may use to determine whether a job that meets the screen does in fact pose an MSD hazard to employees in that job. These tools appear in two appendices (Appendices D-1 and D-2) to the standard. OSHA believes that a number of jobs that meet the screen will subsequently be shown, by a job hazard analysis, not to present a hazard to employees. For example, some jobs will have an ergonomic risk factor, or a combination of risk factors, at levels that meet the screen; however, use of one of the hazard identification tools in Appendix D, such as the Rapid Upper Limb Assessment (RULA), may show that the risk factors present in the job are within the "acceptable" zone on that tool.

The final rule permits employers to use a variety of hazard identification tools, which are included in appendices to the standard. Employers may also choose to rely for hazard identification on the services of a safety and health professional trained and experienced in ergonomics; in addition, they may choose to use any other reasonable method that is appropriate to the job and addresses the relevant risk factors. If the job hazard analysis identifies MSD hazards in the injured employee's job, the employer must then identify and implement controls to reduce these hazards.

The standard also permits employers great flexibility in meeting their obligations to control MSD hazards in jobs that have been identified as posing MSD hazards to employees. Employers may fulfill their obligations by:

- Controlling MSD hazards (defined as reducing the hazards to the extent they are no longer reasonably likely to cause MSDs that result in work restrictions, or medical treatment beyond first aid); or
- Reducing MSD hazards in accordance with or to the levels indicated by one of the hazard identification tools used by the employer in the job hazard analysis; or
- Reducing MSD hazards to the extent feasible.

Employers who control their problem jobs to one of these "endpoints" will be considered to be in compliance with the standard's hazard control requirements. OSHA believes that the range of control obligation endpoints permitted by the standard will ensure that employers will

<sup>1</sup> Employers qualifying for and choosing to use the Quick Fix provision of the standard do not have to implement a program but may instead implement controls and follow other procedures to address the risk factors in that job alone.

be able to control all of their problem jobs.

Employers are also permitted by the standard to use any combination of engineering, work practice, and administrative controls to meet their control obligations, although personal protective equipment may only be used alone when other kinds of controls are not feasible.

The standard's requirements for MSD management mandate that employers provide employees who have experienced an MSD incident in a job meeting the action trigger with: access to a health care professional; any work restriction or removal from work deemed to be necessary to allow the injured body part to recover; and the evaluation, management, and follow-up of the MSD needed to facilitate the employee's recovery. In addition, employers are required to maintain 100 percent of the wages, benefits, and employment rights of employees placed on restricted work to recover from an MSD, and they must maintain 90% of the wages, and all benefits and employment rights, of employees removed from work to recover. These protections, termed "work restriction protections" (WRP) by the standard, must be maintained until the *first* of the following occurs:

- An HCP determines that the employee can never return to the former job;
- The employee is able to return to the former job without endangering his or her recovery; or
- Ninety calendar days have passed.

As discussed at length in the summary and explanation for paragraph (r), OSHA has concluded that work restriction protections are required to encourage employees to come forward to report their signs and symptoms and to participate in the employer's MSD management program.

The standard also requires employees in problem jobs to be trained, initially and periodically, in the employer's ergonomics program and their role in it; the MSD hazards present in their jobs; the employer's plan for controlling these hazards; the use of these controls; and ways of evaluating the effectiveness of the controls selected. The training must be provided in language that the employee understands.

Employers must also evaluate their ergonomics programs, or the relevant part of their program, when they believe that the program or one of its elements is not functioning properly or that operations in the workplace have changed in a way that may increase employee exposure to ergonomic risk factors. In addition, program evaluations must be conducted every three years, at a minimum.

The standard requires employers with 11 or more employees to maintain records of: Employee reports of MSDs and MSD hazards (including employer's response to such reports), Job hazard analyses, Controls implemented, Quick fixes, Program evaluations, and Work restrictions and HCP written opinions. Required records must be accessible to employees and their designated representatives.

The standard provides a series of extended compliance phase-in dates for the various provisions of the standard. These range from 9 months to 4 years, depending on the particular provision.

Table VIII-1, based on data from *County Business Patterns* for 1996, shows the three-digit industries covered by the standard and the number of employees and establishments in each covered industry within the general industry sector (Ex. 28-2). Table VIII-1 also shows the estimated annual incidence rates for all MSDs (lost workday, restricted work, and non-lost workday) for each industry. These estimates do not include the number of MSDs currently underreported that OSHA believes will be reported once the standard is in effect or the number of reports of MSD signs and symptoms that will qualify under the final rule as MSD incidents. Together, these two kinds of MSDs increase the number of MSDs shown on Table VIII-1 by 50 percent. These rates differ from those shown in the risk assessment section of the Preamble because they include an estimate of all MSDs, rather than lost workday MSDs only, and because they use *County Business Patterns* estimates of industry employment in computing MSD rates. Table VIII-1 shows that the total MSD incidence rates in general industry range as high as 1,448 per 10,000 workers (in Public building and related furniture (SIC 253)). A total of about 6.1 million establishments and 102 million employees are present in general industry including state and local government.

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**Table VIII-1: Estimated Number of Establishments and Employees and Estimated Annual Incidence of All MSDs, by 3-Digit SIC**

SIC	Industry	Total Number of Establishments	Total Number of Employees in all Establishments	Total MSD Incidence Rate* (per 10,000 workers)
074	Veterinary services	22,807	174,576	112
075	Animal serv., except vet.	10,369	42,832	71
078	Landscape & hort. services	68,157	345,871	268
081	Timber tracts	862	7,025	202
083	Forest products	137	2,082	234
085	Forestry services	1,568	12,265	135
091	Commercial fishing	1,947	8,850	167
092	Fish hatcheries	95	1,465	167
097	Hunting & trapping	339	1,650	172
131	Crude petrol. & nat. gas	7,758	83,909	74
132	Natural gas liquids	560	12,814	110
138	Oil & gas field services	8,764	159,639	152
201	Meat products	3,080	458,861	761
202	Dairy products	1,881	134,051	496
203	Presrved fruits & vegetables	2,016	183,797	410
204	Grain mill products	2,603	109,406	520
205	Bakery products	3,523	230,724	402
206	Sugar and confect. prods	1,098	86,710	357
207	Fats and oils	507	26,512	311
208	Beverages	2,286	144,328	703
209	Misc. food products	4,007	165,889	453
211	Cigarettes	15	20,498	319
212	Cigars	47	2,737	119
213	Chewing & smoking tobacco	26	2,479	288
214	Tobacco stemm. & redrying	32	5,055	331
221	Brdwven fab. mills, cotton	412	50,459	844
222	Broadwoven fabric mills	458	79,013	257
223	Brdwvn fab. mills, wool	99	13,628	224
224	Narrow fabric mills	277	17,608	558
225	Knitting mills	1,945	177,354	355
226	Tex. finishing, except wool	852	53,437	372
227	Carpets and rugs	484	52,137	246
228	Yarn and thread mills	588	82,102	322
229	Misc. textile goods	1,010	54,492	329
231	Men's & boys' suits & coats	293	30,229	338
232	Men's & boys' furnishings	2,112	211,208	455
233	Wm's & misses' outerwear	8,954	249,317	206
234	Wm's & chldrn's undergarments	372	35,283	365
235	Hats, caps, & millinery	381	18,675	273
236	Girls' & chldrn's outerwear	585	36,315	233
237	Fur goods	133	550	273
238	Misc. apparel & accessories	933	30,771	317
239	Misc. fab. textile prods	8,797	220,100	310
241	Logging	14,273	86,675	67
242	Sawmills & planing mills	6,103	167,103	401
243	Millwork & plywood	9,548	254,660	553
244	Wood containers	2,830	48,027	401
245	Wood bldings & mobile homes	1,044	82,857	678
249	Misc. wood products	3,536	91,967	367
251	Household furniture	5,500	263,791	460
252	Office furniture	1,033	70,867	509

Table VIII-1: Estimated Number of Establishments and Employees and Estimated Annual Incidence of All MSDs, by 3-Digit SIC

SIC	Industry	Total Number of Establishments	Total Number of Employees in all Establishments	Total MSD Incidence Rate* (per 10,000 workers)
253	Pub bldng & related furn.	449	34,886	1448
254	Partitions and fixtures	2,996	80,751	507
259	Misc furniture and fixtures	1,412	45,588	319
261	Pulp mills	62	15,349	138
262	Paper mills	344	121,373	360
263	Paperboard mills	228	54,165	155
265	Paperbrd containers & boxes	2,809	206,643	327
267	Misc. cnvrted paper products	3,033	227,539	303
271	Newspapers	8,878	395,716	196
272	Periodicals	5,781	117,880	117
273	Books	3,559	135,942	206
274	Miscellaneous publishing	3,259	61,716	122
275	Commercial printing	34,435	587,534	226
276	Manifold business forms	911	45,341	359
277	Greeting cards	143	19,958	434
278	Blankbooks & bookbinding	1,583	63,356	317
279	Printing trade services	3,436	56,387	113
281	Indust. inorganic chemicals	1,390	85,705	163
282	Plastics mat. & synthetics	876	117,868	163
283	Drugs	1,637	207,295	193
284	Soap, clnrs, & toilet goods	2,434	120,815	237
285	Paints & allied products	1,479	52,183	264
286	Indust. organic chemicals	946	121,918	120
287	Agricultural chemicals	938	40,431	152
289	Misc. chemical products	2,566	86,431	263
291	Petroleum refining	275	70,045	107
295	Asphlt pavng & roofng mat.	1,368	24,390	294
299	Misc. pet. & coal prods	466	13,874	101
301	Tires and inner tubes	171	65,902	686
302	Rubber & plastics footwear	61	8,895	724
305	Hose, bltng, and gaskets	826	59,475	578
306	Fab. rubber prod., n.e.c.	1,767	111,074	574
308	Misc plastics, n.e.c.	13,648	751,503	420
311	Leather tan. & finishing	343	14,843	552
313	Footwear cut stock	70	2,103	347
314	Footwear, except rubber	378	38,768	480
315	Leather gloves & mittens	69	2,349	753
316	Luggage	261	10,231	229
317	Hndbags & prsnal leathr gds.	343	9,382	385
319	Leather goods, n.e.c.	418	8,414	580
321	Flat glass	81	13,203	749
322	Glass, pressed or blown	589	61,911	562
323	Prod. of purchased glass	1,640	61,300	507
324	Cement, hydraulic	231	16,283	311
325	Structural clay products	593	29,093	532
326	Pottery & related prods	1,200	39,441	625
327	Concrete & plast. prdcts	9,498	190,188	360
328	Cut stone & stone prods	1,071	13,867	397
329	Misc. nonmet. mineral prods.	1,599	69,785	411
331	Basic steel products	1,284	225,373	438
332	Iron and steel foundries	1,160	133,111	794

**Table VIII-1: Estimated Number of Establishments and Employees and Estimated Annual Incidence of All MSDs, by 3-Digit SIC**

SIC	Industry	Total Number of Establishments	Total Number of Employees in all Establishments	Total MSD Incidence Rate* (per 10,000 workers)
333	Primary nonfer. metals	201	34,534	444
334	Secondary nonfer. metals	299	15,013	543
335	Nonfer. rolling & drawing	1,105	153,482	503
336	Nonfer. foundries (cstngs)	1,662	89,402	629
339	Misc. primary metal prdcts	947	31,444	231
341	Met. cans & ship. containers	435	35,214	431
342	Cutlery, hndtls, & hardware	2,446	133,392	476
343	Plumbing & heating fixtures	688	46,295	920
344	Fab. struct. metal prdcts	13,334	428,117	450
345	Screw machine products	2,602	99,345	491
346	Met. forgings & stampings	3,694	258,010	704
347	Metal services, n.e.c.	5,529	124,099	383
348	Ordinance and access., n.e.c.	438	39,859	339
349	Misc. fab. metal products	7,266	296,592	452
351	Engines and turbines	371	75,184	561
352	Farm & garden machinery	1,761	98,072	501
353	Construct. & related mach.	3,324	195,304	508
354	Metalworking machinery	11,811	295,152	376
355	Special industry mach.	4,790	190,365	348
356	General indust. mach.	4,378	260,600	413
357	Computer & office equip.	2,112	227,720	213
358	Refrig. & serv. indust mach.	2,246	199,595	566
359	Industrial mach., n.e.c.	25,875	377,370	304
361	Elect. dist. equipment	875	68,623	369
362	Elect. indust. apparatus	2,260	162,510	440
363	Household appliances	474	106,685	677
364	Elct. lghtng & wire equip.	2,117	154,073	474
365	Household audio & vid. equip.	815	50,938	408
366	Communications equipment	2,110	254,639	170
367	Electrnic compnnts & access.	6,570	594,638	196
369	Misc. elect. equipment	1,788	152,482	499
371	Motor vehicles & equipt.	5,049	785,168	1221
372	Aircraft and parts	1,693	400,899	358
373	Ship, boat bldng and repair	2,676	52,904	630
374	Railroad equipment	213	35,344	630
375	Motorcycles & bicycles	370	16,400	615
376	Guided missiles	105	78,710	141
379	Misc. transportation equip.	1,135	53,849	569
381	Srch & navigation equipment	696	184,871	124
382	Meas. & contrllng devices	4,755	265,806	257
384	Medical instrmnts & supplies	4,471	267,624	221
385	Ophthalmic goods	587	26,417	312
386	Photo. equip. & supplies	721	62,716	377
387	Watches, clocks, & parts	141	5,765	144
391	Jwlry, slvrwre, and plate	2,813	45,819	236
393	Musical instruments	550	13,562	549
394	Toys and sporting goods	3,515	106,609	534
395	Office and art supplies	1,038	28,540	233
396	Costume jewelry & notions	1,092	22,970	189
399	Misc. manufactures	8,803	171,667	338
411	Local & suburban trans.	9,536	194,756	419

Table VIII-1: Estimated Number of Establishments and Employees and Estimated Annual Incidence of All MSDs, by 3-Digit SIC

SIC	Industry	Total Number of Establishments	Total Number of Employees in all Establishments	Total MSD Incidence Rate* (per 10,000 workers)
412	Taxicabs	3,304	27,944	67
413	Intercty & rural bus trans.	481	20,621	292
414	Bus charter service	1,432	29,190	97
415	School buses	4,248	143,919	81
417	Bus terminals	57	477	509
421	Trking & Courier Service	116,861	1,725,748	257
422	Pub. warehousing & storage	11,856	121,344	441
423	Trucking terminal fac.	80	766	501
430	United States Postal Service	33,316	904,636	325
451	Air trans., scheduled	6,608	621,649	1171
452	Air trans., nonsched.	1,831	28,845	175
458	Airports and services	4,014	104,581	322
461	Pipelines, excpt natural gas	963	15,065	446
472	Pass. trans. arrangements	33,106	223,624	27
473	Freight trans. arrangements	14,771	137,522	148
474	Rental of railroad cars	116	2,326	113
478	Misc. trans. services	2,681	42,104	269
481	Telephone communication	27,277	927,967	101
482	Telegrph & other comm.	466	5,782	75
483	Radio & TV broadcasting	8,833	238,078	36
484	Cable & othr pay TV services	4,786	170,300	172
489	Communication serv., n.e.c.	1,488	22,405	45
491	Electric services	6,278	382,861	187
492	Gas product. & distribution	3,941	135,670	219
493	Comb. utility services	1,871	199,685	125
494	Water supply	3,701	26,045	227
495	Sanitary services	6,491	130,347	532
496	Steam & air-cond. supplies	69	1,400	225
497	Irrigation systems	366	1,785	225
501	Motor vehicles	45,779	520,711	218
502	Furn. & homefurnishings	16,693	169,720	249
503	Lumber & construct. mat.	23,678	264,739	411
504	Prof. & commercial equip.	51,941	725,137	139
505	Met. & minerals, excpt pet.	11,416	154,821	296
506	Electrical goods	41,707	508,202	156
507	Hardware supplies	26,119	269,607	303
508	Mach., equipt, & supplies	76,249	762,397	223
509	Misc. durable goods	40,029	354,068	190
511	Paper and paper products	18,712	291,514	129
512	Drugs, propriet., & sundries	7,316	173,960	147
513	Apparel and notions	21,766	209,032	145
514	Groceries & related products	43,314	846,803	387
515	Farm-prod. raw materials	10,680	98,112	82
516	Chemicals & allied prods	15,171	163,603	152
517	Petrol. & petrol. prods	13,177	153,471	161
518	Beer, wine, & dist. bev.	5,055	148,567	553
519	Misc. nondurable goods	54,335	505,832	208
521	Paint, glass, wallpaper strs	24,266	475,454	401
523	Hardware stores	9,777	49,415	315
525	Retail nurseries and gardens	14,282	124,402	215
526	Mobile home dealers	11,258	80,822	254



Table VIII-1: Estimated Number of Establishments and Employees and Estimated Annual Incidence of All MSDs, by 3-Digit SIC

SIC	Industry	Total Number of Establishments	Total Number of Employees in all Establishments	Total MSD Incidence Rate* (per 10,000 workers)
527	Department stores	4,780	36,746	371
531	Variety stores	10,824	1,850,213	378
533	Misc. gen. merchandise str.	10,848	92,765	513
539	Grocery stores	14,797	316,419	139
541	Meat and fish markets	129,150	2,980,869	254
542	Fruit & vegetable markets	7,868	45,979	183
543	Candy, nut, & confctnry str	3,342	19,178	106
544	Dairy products stores	4,742	27,794	91
545	Retail bakeries	2,550	14,746	68
546	Retail bakeries	20,156	148,069	120
549	Misc. food stores	9,904	55,450	89
551	New and used car dealers	24,639	1,014,799	200
552	Used car dealers	21,951	85,892	28
553	Auto & home supply stores	43,806	345,849	212
554	Gas service stations	96,236	713,280	110
555	Boat dealers	5,068	33,121	220
556	Rec. vehicle dealers	2,995	28,499	300
557	Motorcycle dealers	3,785	29,387	20
559	Auto dealers, n.e.c.	1,234	5,654	28
561	Men's & boys' clothing str	13,844	92,334	67
562	Women's clothing stores	40,559	327,351	40
563	Wm's access. & specialty str	8,647	50,147	41
564	Chldrn's & infants' wear str	5,186	45,078	53
565	Family clothing stores	19,583	329,123	165
566	Shoe stores	31,737	180,967	67
569	Misc. apparel stores	10,161	53,173	31
571	Furnitre & homefurnishng str	66,004	475,508	260
572	Household appliance str	10,045	63,989	239
573	Radio, TV, & comptr str	39,074	336,182	105
581	Eating & drinking places	466,386	7,416,595	79
591	Drug stores	43,221	588,160	75
592	Liquor stores	28,812	128,995	32
593	Used merchandise stores	23,524	117,116	127
594	Misc. shopping goods str.	129,136	850,337	107
596	Nonstore retailers	29,947	372,947	257
598	Fuel dealers	11,317	95,385	155
599	Retail stores, n.e.c.	95,174	468,433	83
601	Central res. depository	102	25,274	191
602	Commercial banks	67,422	1,507,165	40
603	Savings institutions	16,131	262,936	34
606	Credit unions	14,921	163,027	65
608	Foreign banking	656	33,830	47
609	Banking-related functions	5,820	68,711	85
611	Federal credit agencies	1,333	22,884	15
614	Personal cred. institutions	18,996	183,249	11
615	Business cred. institutions	5,358	104,991	42
616	Mortgage bankers & brokers	21,897	226,475	34
621	Security brokers & dealers	25,523	411,411	19
622	Commodity contracts brokers	1,623	13,185	18
623	Security & commod. exchanges	117	7,650	62
628	Security & commod. services	18,123	135,349	12

Table VIII-1: Estimated Number of Establishments and Employees and Estimated Annual Incidence of All MSDs, by 3-Digit SIC

SIC	Industry	Total Number of Establishments	Total Number of Employees in all Establishments	Total MSD Incidence Rate* (per 10,000 workers)
631	Life insurance	11,754	547,789	32
632	Medical & health insur.	3,337	306,420	114
633	Fire, marine, & caslty ins.	20,361	594,733	83
635	Surety insurance	579	10,255	48
636	Title insurance	2,546	39,886	97
637	Pension and health funds	2,747	33,107	42
639	Ins. carriers, n.e.c.	292	4,018	72
641	Insurance agents	127,278	695,139	28
651	Real estate operators	100,612	499,293	174
653	RE agents and managers	124,530	756,905	73
654	Title abstract offices	5,195	35,417	102
655	Subdividers & developrs	18,561	115,746	201
671	Holding offices	9,575	161,371	57
672	Investment offices	920	24,933	32
673	Trusts	8,841	57,282	56
679	Miscellaneous investing	8,419	56,460	43
701	Hotels and motels	45,252	1,539,037	241
702	Rooming & boarding houses	1,624	9,302	285
703	Camps and rec. vehicle parks	7,435	35,478	21
704	Membership-basis org. hotels	2,410	12,891	21
721	Laundry & garment srvcies	56,704	443,179	200
722	Photo studios, portrait	13,168	70,481	74
723	Beauty shops	81,872	390,177	31
724	Barber shops	4,499	14,506	134
725	Shoe repair	2,216	5,807	134
726	Fun. service and crematories	15,784	99,027	65
729	Misc personal services.	30,697	254,674	9
731	Advertising	19,664	242,468	124
732	Credit report.& collection	6,914	109,523	52
733	Mailing, reprod, steno., serv	35,058	285,511	118
734	Services to buildings	65,559	916,370	165
735	Misc. equipt. rental	24,814	229,196	142
736	Pers. supply services	37,374	2,778,419	48
737	Comprr & data proc. services	88,911	1,266,890	33
738	Misc. business services	85,634	1,366,526	70
751	Auto rentals, no drivers	10,643	149,154	93
752	Automobile parking	8,892	65,390	57
753	Automotive repair shops	139,184	608,702	108
754	Automotive serv., exc repair	26,948	211,838	153
762	Electrical repair shops	19,328	144,758	133
763	Watch and jewelry repair	1,805	5,705	133
764	Reupholstery & furn. repair	6,842	22,674	96
769	Misc. repair shops	39,008	262,495	160
781	Motion picture production	14,680	240,953	249
782	Motion picture dist.	1,456	21,899	575
783	Motion picture theaters	6,572	118,921	324
784	Video tape rental	20,816	129,258	312
791	Dance studios & schools	5,719	27,063	203
792	Prducrs, orch., entertainers	16,839	161,158	94
793	Bowling centers	5,735	90,614	50
794	Commercial sports	4,763	101,728	218

**Table VIII-1: Estimated Number of Establishments and Employees and Estimated Annual Incidence of All MSDs, by 3-Digit SIC**

<b>SIC</b>	<b>Industry</b>	<b>Total Number of Establishments</b>	<b>Total Number of Employees in all Establishments</b>	<b>Total MSD Incidence Rate* (per 10,000 workers)</b>
799	Misc. recreation services	61,841	991,444	181
801	Offices of medical doctors	186,994	1,688,823	78
802	Dentists offices and clinics	113,054	634,709	50
803	Osteopathic physicians	9,105	53,700	28
804	Other health practitioners	84,667	353,204	166
805	Nursing & personal care fac.	24,009	1,806,086	706
806	Hospitals	7,282	5,067,349	327
807	Med. & dental labs	15,243	190,629	84
808	Home hlth care services	16,106	779,365	285
809	Hlth & allied serv., n.e.c.	20,849	387,020	121
811	Legal services	168,276	959,809	39
821	Elem. & secondary schools	18,017	609,190	45
822	Colleges & universities	3,663	1,258,979	46
823	Libraries	2,252	22,343	22
824	Vocational schools	6,816	79,561	23
829	Schools, n.e.c.	15,395	124,076	22
832	Individual & fam. services	43,047	596,191	190
833	Job train. & related serv.	9,114	325,655	107
835	Child day care services	53,592	553,897	80
836	Residential care	28,762	550,745	353
839	Social services, n.e.c.	15,702	216,649	87
841	Museums & art galleries	4,520	63,818	129
842	Bot. & zoolog. gardens	585	16,044	172
861	Business associations	15,767	111,371	30
862	Prof. organizations	7,033	63,638	24
863	Labor organizations	19,536	169,366	16
864	Civic & social assoc.	36,944	369,808	70
865	Political organizations	2,579	10,719	95
866	Religious organizations	158,299	1,380,975	8
869	Membership orgs., n.e.c.	9,072	106,606	81
871	Eng. and arch. services	78,815	910,439	38
872	Accntng, auditng, & bkeeping	84,175	639,896	59
873	Research & testing services	19,471	458,980	113
874	Management & pub. relations	95,033	985,335	69
899	Services, n.e.c.	17,221	105,803	249
	<b>Subtotal</b>	<b>5,932,581</b>	<b>93,577,856</b>	<b>220</b>
	State and local governments	180,201	9,184,961	203
	<b>Total</b>	<b>6,112,782</b>	<b>102,762,817</b>	<b>218</b>

Sources: Office of Regulatory Analysis, OSHA. The numbers of establishments are taken from County Business Patterns, U.S. Bureau of the Census (1996)(Ex. 28-2). The number of MSDs are based on special data runs done by the BLS, based on lost workday cases (with days away from work) from the Annual Survey, 1996 (Ex. 26-1413). MSD rates are calculated by multiplying, for each industry, the number of lost workday (with days away from work) MSDs reported by employers to the BLS by the ratio of all lost workday (with days away from work) injuries and illnesses for that industry to all workday injuries and illnesses for that industry. OSHA used this approach because the BLS only reports the number of lost workday (with days away from work) MSDs by industry.

\* Adding the number of currently unreported MSDs that OSHA believes will be reported once the standard is in effect and the increase in MSD incidents OSHA believes will occur because persistent signs and symptoms will be reported increases these totals by 50%. (See the benefits chapter for further explanation).

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*C. Technological Feasibility (Chapter III)*

Chapter 3 of the economic analysis for the final ergonomics rule illustrates the technological feasibility of controlling MSD hazards in problem jobs in accordance with the rule. The analysis presented in this chapter demonstrates that controlling MSD hazards is feasible in the industry sectors included in the scope of the rule.

OSHA has approached the analysis of technological feasibility for the final rule from four perspectives. The four analyses for technological feasibility are:

- Risk factor analysis—This analysis demonstrates the variety of methods available for controlling the five risk factors covered by the rule. Information drawn from the rulemaking record demonstrates how risk factors can be controlled and how these controls can achieve compliance with one or more of the final rule's compliance endpoints.
- Ergonomic program analysis—This analysis demonstrates the feasibility of implementing effective ergonomics programs by identifying cases in the rulemaking record where effective programs, that have program elements similar to or the same as those required by the final rule, have already been implemented.
- Model job analysis—This analysis demonstrates how the risk factors inherent in model jobs that represent the highest rates of lost workday MSDs according to BLS data can be controlled in accordance with the final rule's compliance endpoints. This analysis also presents a model job analysis for video display terminal (VDT) workstations.
- Industry-by-industry analysis—This analysis demonstrates the broad applicability of the available control methods to virtually all of the covered industries, as described by 3-digit SIC codes.

Each of these analyses was performed based on information contained in the rulemaking record. These analyses demonstrate that compliance with the final rule including paragraphs (k)(1)(i) and (k)(1)(ii) is technologically feasible for most processes in most workplaces most of the time.

Finally, controlling MSD hazards in accordance with the final rule can be accomplished (that is, is feasible) because paragraph (k)(1)(iii) of the rule states that employer is only required to reduce hazards to the extent feasible. OSHA expects that employers will implement feasible controls in the context of their own individual workplace. This provision recognizes that, while controlling MSD hazards to

one of the levels specified in paragraph (k)(1)(i) or (k)(1)(ii) is feasible in the majority of workplaces, hazard reduction to those levels may not be feasible under certain workplace conditions at certain times.

*D. Benefits Analysis (Chapter IV)*

In its analysis of both the benefits and costs of the final standard, OSHA has estimated MSD rates based on BLS data. However, as discussed in Chapter IV of the Final Economic Analysis, there is extensive evidence that MSDs are underreported to the BLS. OSHA estimates that there is at least one unreported MSD for every MSD reported to BLS on OSHA logs. However, the final standard creates incentives for employees to report MSDs by providing work restriction protection to employees. The final standard can also be triggered by reports of persistent symptoms. To account for these differences, OSHA estimates that MSD incidents will be reported at a rate 50 percent higher than current MSD rates based on BLS data.

Most of the benefits of the final standard will be generated when employers fix their problem jobs and thus reduce the number of covered MSDs these jobs cause. Hazard information, MSD management and work restriction protection will also generate benefits because they will ensure that MSDs are identified and treated early in their development, thus preventing progression of the MSD to a serious long-term disability. However, OSHA has not found ways to calculate the benefits of early detection, although the Agency is aware that early reporting and medical management have substantial benefits that are similar to those associated with preventive medicine in general. For example, Oxenburgh *et al.* (1985) compared two groups of VDU operators (Ex. 26-1041). In Group A, which did not report early or receive medical management early, 22% of cases were at the second or third stage by the time they sought medical attention, compared with 8% at these stages in Group B, which had been made aware of the need to report early and the value of prompt medical management. The mean period of absence for Group A workers was 33.9 days; only 25% of this group continued to work (*i.e.*, at alternate duty) throughout the period of recuperation. In Group B, however, the mean period of absence from work was only 3.4 days, and fully 80% of this group remained in alternate duty throughout. The mean number of alternate duty days was 91 days for Group A workers and 31.5 days for those in Group B. The total amount

of time the average worker in Group A lost, either to days away or alternate duty, was 124.9 days; in Group B, this figure decreased by 72%, to 34.9 days.

The final standard (and therefore this economic analysis) is structured in such a way that the number of jobs fixed in any given year depends on the number of MSD incidents reported that involve workers in jobs that need to be controlled, and the number of workers OSHA estimates hold jobs that involve the same physical work activities as the job giving rise to the reported MSD. For purposes of estimating the number of jobs that will require control under the final standard, OSHA used answers to a Washington state survey indicative of how many workers would be above the compliance endpoint given in Appendix D-1 (Ex. 500-41-3). This survey showed that 37 percent of all workers will be exposed at levels that meet the screen, and thus that their jobs will require job hazard analysis, medical management and work restriction protection. The survey also showed that 33 percent of workers will be above the levels indicated by the hazard identification tools in Appendix D-1, and thus will require hazard controls.

Combining this data allowed OSHA to estimate the number of jobs that would be controlled and the resulting reduction in the number of MSDs projected as a result of the standard. OSHA estimates that employers will be required to fix almost 7 million jobs in the first year the standard is in place, and a diminishing number every year thereafter. Over ten years, approximately 18 million jobs will be fixed. OSHA estimates that fixing these jobs will reduce the number of MSD incidents caused by these jobs by 50 percent per year (based on the effectiveness rate reported in the Risk Assessment section of this preamble) for the next ten years (the time horizon of this analysis). In the first 10 years, the final standard is therefore projected to avert approximately 2.3 million currently reported MSDs and an additional 2.3 million MSDs not currently reported, for a total of 4.6 million MSDs averted. These estimates reflect changes from the estimates in the Preliminary Economic Analysis, which are mainly the result of the inclusion of the screen and clearly defined compliance endpoints in the standard, but are also the result of including unreported MSDs in the analysis of benefits. These changes to the standard make the rule substantially more cost effective than the proposal would have been, because they reduce the number of jobs to be fixed by 40 percent.

OSHA estimates that the direct cost savings associated with each currently reported MSD, including the savings in lost productivity, lost tax payments, and administrative costs for workers' compensation claims, are \$27,700 and \$7,000 per MSD not currently reported (1996 dollars). (The difference in the dollar values assigned to these two categories of MSDs is attributable to the fact that OSHA assumes that the currently unreported MSDs are much less severe than those being reported.) These direct cost savings do not attribute a value or assign a monetary cost to the pain and suffering of injured or ill workers, losses to their families, or losses of the worker's ability to contribute at home, and are thus conservative estimates of these savings. Based on this estimate of the direct cost savings associated with each reported MSD avoided, the annualized benefits (using a discount rate of 7%) accruing in the first ten years the standard is in effect are estimated to be \$9.1 billion per year.

#### *E. Costs of Compliance (Chapter V)*

This chapter presents OSHA's estimates of the costs employers would incur to comply with the ergonomics program rule. The costs reported are annualized costs measured in real 1996 dollars over the first 10 years the rule is in effect. To calculate annualized costs, non-recurring costs have been annualized using a discount rate of 7 percent for an estimated life of 10 years.

The cost analysis does not account for any changes in the economy over time, or for possible adjustments in the demand and supply of goods, changes in production methods, investment effects, or macroeconomic effects of the standard. Taking account of all of these effects could increase or decrease the cost or benefit estimates presented here, although the macroeconomic effects of any rule whose costs are less than 0.05 percent of GNP are likely to be minimal. OSHA believes that its approach, *i.e.*, of determining the benefits and costs of the standard for industry as it is today, is the least speculative and least controversial way of presenting the benefits and costs of the final standard.

OSHA relied on responses to a 1993 ergonomics survey (see Chapter V of the Final Economic Analysis) of thousands of general industry employers to estimate the extent to which establishments within the scope of the standard already have implemented ergonomics programs involving the control of jobs. This current industry baseline was taken into account in calculating industry-by-industry and size-of-establishment cost estimates, *i.e.*, any costs employers have already incurred, and any benefits they have already accrued, to voluntarily implement such programs have not been attributed to the final rule.

Costs were calculated separately at the three-digit SIC code level for all industries. These industry-by-industry cost estimates account for differences

among industries in terms of wage rates, turnover, baseline rates of compliance, and the MSD rate for the industry. To facilitate analysis of the impacts of the final rule on small businesses, costs were calculated separately for each of three size classes of establishments. The Final Regulatory Flexibility Analysis (Section VIII. H. of this Preamble) provides a detailed summary of OSHA's unit cost estimates for each element of the standard.

OSHA estimates that the annualized costs to society of the final standard will be \$3.9 billion per year. (All costs are expressed as 1996 dollars and annualized using a 7 percent discount rate and a 10-year annualization period.) Table VIII-2 shows the costs of the final ergonomics standard, by major provision of the standard. Costs are considered in two parts: costs to society and costs to employers. This distinction is necessary because the costs associated with the standard's work restriction protection provisions represent a cost to employers, but not to society as a whole. Table VIII-2 shows that the total estimated costs to society for the private sector are \$3.4 billion per year, while estimated costs for all affected parties, including state and local governments, are \$3.9 billion per year. Estimated costs to employers in the private sector as a whole are \$4 billion per year, and to all affected sectors are \$4.5 billion per year.

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TABLE VIII-2

## Total Cost of Compliance, by Provision of the Final Rule and 3-Digit SIC

SIC	Industry	Determination of Coverage by the Standard and Grandfather Status	Initial Employer Actions	Programmatic Elements	Job Fixes	SUBTOTAL (cost to society)	Work Restriction Protection	TOTAL (cost to employers)
074	Veterinary services	\$55,969	\$588,438	\$2,605,047	\$2,242,914	\$5,492,368	\$1,133,706	\$6,626,074
075	Animal serv., except vet.	\$24,625	\$203,956	\$477,975	\$516,754	\$1,223,311	\$183,151	\$1,406,462
078	Landscape & hort. services	\$188,840	\$1,795,148	\$8,386,809	\$12,248,790	\$22,619,588	\$3,399,614	\$26,019,201
081	Timber tracts	\$3,953	\$39,766	\$165,169	\$262,425	\$471,313	\$53,076	\$524,389
083	Forest products	\$626	\$8,906	\$42,185	\$83,419	\$135,135	\$16,561	\$151,696
085	Forestry services	\$7,187	\$66,225	\$263,273	\$293,718	\$630,402	\$85,683	\$716,085
091	Commercial fishing	\$8,926	\$70,655	\$182,972	\$317,470	\$580,023	\$51,737	\$631,759
092	Fish hatcheries	\$437	\$5,454	\$28,537	\$50,883	\$85,311	\$8,660	\$93,972
097	Hunting & trapping	\$1,555	\$12,568	\$38,248	\$45,082	\$97,454	\$11,998	\$109,451
131	Crude petrol. & nat. gas	\$55,733	\$552,918	\$2,055,016	\$1,284,113	\$3,947,780	\$299,514	\$4,247,294
132	Natural gas liquids	\$2,567	\$35,852	\$120,313	\$31,634	\$190,365	\$15,681	\$206,046
138	Oil & gas field services	\$39,198	\$580,050	\$3,088,385	\$4,190,723	\$7,898,356	\$923,046	\$8,821,401
201	Meat products	\$13,593	\$2,588,299	\$6,600,906	\$4,101,152	\$13,303,950	\$3,032,298	\$16,336,248
202	Dairy products	\$8,339	\$628,553	\$3,039,164	\$1,890,319	\$5,566,375	\$1,614,800	\$7,181,176
203	Preservd fruits & vegetables	\$10,054	\$785,708	\$2,727,120	\$1,470,897	\$4,993,780	\$720,509	\$5,714,289
204	Grain mill products	\$11,931	\$586,118	\$2,838,747	\$1,420,415	\$4,857,211	\$1,399,678	\$6,256,889
205	Bakery products	\$17,221	\$1,005,032	\$4,828,285	\$3,214,927	\$9,065,466	\$2,161,726	\$11,227,192
206	Sugar and confection. prods	\$6,671	\$399,503	\$1,961,285	\$1,237,414	\$3,604,873	\$750,688	\$4,355,561
207	Fats and oils	\$2,649	\$107,061	\$635,679	\$293,416	\$1,038,806	\$256,745	\$1,295,550
208	Beverages	\$10,478	\$938,667	\$3,815,157	\$2,155,793	\$6,920,096	\$2,232,947	\$9,153,043
209	Misc. food products	\$20,618	\$809,121	\$3,723,359	\$2,375,465	\$6,928,564	\$1,883,266	\$8,811,830
211	Cigarettes	\$69	\$97,937	\$531,148	\$147,240	\$776,393	\$135,586	\$911,979
212	Cigars	\$215	\$9,118	\$60,925	\$29,143	\$99,402	\$10,610	\$110,012
213	Chewing & smoking tobacco	\$119	\$16,313	\$74,240	\$12,207	\$102,880	\$38,593	\$141,473
214	Tobacco stemm. & redrying	\$147	\$22,104	\$127,651	\$69,323	\$219,225	\$41,418	\$260,642
221	Brdwnn fab. mills, cotton	\$1,851	\$128,589	\$741,588	\$706,102	\$1,578,130	\$151,747	\$1,729,877
222	Broadwoven fabric mills	\$2,130	\$208,724	\$1,250,564	\$1,054,106	\$2,515,525	\$256,984	\$2,772,508
223	Brdwnn fab. mills, wool	\$431	\$31,714	\$198,060	\$154,933	\$385,137	\$38,112	\$423,249
224	Narrow fabric mills	\$1,316	\$82,035	\$380,830	\$206,446	\$670,627	\$122,973	\$793,599
225	Knitting mills	\$8,083	\$524,251	\$2,777,945	\$2,484,621	\$5,794,900	\$762,174	\$6,557,074
226	Text. finishing, except wool	\$3,507	\$173,626	\$927,163	\$725,422	\$1,829,719	\$249,130	\$2,078,849
227	Carpets and rugs	\$2,002	\$125,134	\$760,187	\$795,415	\$1,682,738	\$162,841	\$1,845,579
228	Yarn and thread mills	\$2,211	\$210,688	\$1,278,852	\$1,096,440	\$2,588,191	\$351,597	\$2,939,788
229	Misc. textile goods	\$4,437	\$182,041	\$1,172,927	\$801,729	\$2,161,135	\$250,326	\$2,411,461
231	Men's & boys' suits & coats	\$1,073	\$89,146	\$387,719	\$142,439	\$620,376	\$197,924	\$818,300
232	Men's & boys' furnishings	\$9,488	\$825,825	\$3,188,101	\$1,106,771	\$5,130,185	\$1,828,868	\$6,959,053
233	Wm's & misses' outerwear	\$36,327	\$742,250	\$3,244,855	\$1,117,179	\$5,140,611	\$1,283,083	\$6,423,694
234	Wm's & children's undergarments	\$1,310	\$103,386	\$446,978	\$243,098	\$794,772	\$255,395	\$1,050,167
235	Hats, caps, & millinery	\$1,681	\$70,760	\$284,804	\$77,772	\$435,018	\$141,430	\$576,448
236	Girls' & children's outerwear	\$1,424	\$71,072	\$357,755	\$186,262	\$616,513	\$198,933	\$815,446
237	Fur goods	\$610	\$5,489	\$13,943	\$378	\$20,419	\$6,004	\$26,422
238	Misc. apparel & accessories	\$4,044	\$109,750	\$463,615	\$199,686	\$777,095	\$221,162	\$998,257
239	Misc. fab. textile prods	\$37,083	\$874,699	\$3,489,164	\$1,670,026	\$6,070,972	\$1,455,258	\$7,526,231
241	Logging	\$65,420	\$529,416	\$1,321,210	\$204,115	\$2,120,161	\$255,264	\$2,375,425
242	Sawmills & planing mills	\$24,881	\$686,429	\$3,874,027	\$1,580,688	\$6,166,026	\$2,228,080	\$8,394,106
243	Millwork & plywood	\$40,059	\$1,297,153	\$7,029,948	\$3,479,519	\$11,846,680	\$3,521,207	\$15,367,887
244	Wood containers	\$6,721	\$142,124	\$999,479	\$431,153	\$1,579,477	\$608,432	\$2,187,909
245	Wood buildings & mobile homes	\$4,814	\$459,960	\$2,234,692	\$1,390,848	\$4,090,315	\$1,297,456	\$5,387,771
249	Misc. wood products	\$14,556	\$365,479	\$2,229,773	\$1,005,085	\$3,614,893	\$972,867	\$4,587,760
251	Household furniture	\$21,334	\$1,010,631	\$5,741,490	\$3,850,344	\$10,623,799	\$2,940,095	\$13,563,894
252	Office furniture	\$5,602	\$369,083	\$1,707,485	\$970,195	\$3,052,363	\$817,340	\$3,869,704
253	Pub bldg & related furn.	\$1,919	\$335,117	\$1,070,938	\$518,092	\$1,926,066	\$1,035,766	\$2,961,832
254	Partitions and fixtures	\$10,791	\$355,056	\$2,179,260	\$1,116,668	\$3,661,776	\$1,109,529	\$4,771,304
259	Misc furniture and fixtures	\$6,874	\$182,081	\$993,025	\$484,807	\$1,666,786	\$412,696	\$2,079,483
261	Pulp mills	\$324	\$46,687	\$298,324	\$229,097	\$574,432	\$82,907	\$657,339
262	Paper mills	\$1,981	\$649,102	\$3,460,912	\$2,198,668	\$6,310,663	\$1,382,580	\$7,693,243
263	Paperboard mills	\$1,318	\$207,462	\$1,304,949	\$832,613	\$2,346,342	\$328,005	\$2,674,347
265	Paperboard containers & boxes	\$14,732	\$896,278	\$5,332,799	\$2,946,155	\$9,189,964	\$2,737,192	\$11,927,157
267	Misc. envrtd paper products	\$19,268	\$1,075,669	\$6,055,066	\$3,471,157	\$10,621,160	\$2,599,663	\$13,220,823
271	Newspapers	\$48,845	\$1,511,961	\$8,613,891	\$5,733,496	\$15,908,193	\$2,857,965	\$18,766,157
272	Periodicals	\$23,797	\$437,055	\$2,124,578	\$781,682	\$3,367,112	\$628,385	\$3,995,497
273	Books	\$17,468	\$502,646	\$2,768,353	\$1,500,855	\$4,789,322	\$1,043,296	\$5,832,617
274	Miscellaneous publishing	\$18,253	\$264,573	\$1,188,860	\$420,429	\$1,892,115	\$363,052	\$2,255,167

TABLE VIII-2

## Total Cost of Compliance, by Provision of the Final Rule and 3-Digit SIC

SIC	Industry	Determination of Coverage by the Standard and Grandfather Status	Initial Employer Actions	Programmatic Elements	Job Fixes	SUBTOTAL (cost to society)	Work Restriction Protection	TOTAL (cost to employers)
275	Commercial printing	\$162,875	\$2,818,804	\$14,432,151	\$4,633,999	\$22,047,829	\$5,834,443	\$27,882,271
276	Manifold business forms	\$4,057	\$202,624	\$1,218,787	\$390,588	\$1,816,055	\$666,313	\$2,482,368
277	Greeting cards	\$787	\$100,929	\$498,029	\$412,292	\$1,012,036	\$260,697	\$1,272,733
278	Blankbooks & bookbinding	\$7,237	\$247,600	\$1,417,307	\$855,181	\$2,527,325	\$787,274	\$3,314,599
279	Printing trade services	\$20,536	\$291,497	\$1,240,279	\$133,605	\$1,685,917	\$332,569	\$2,018,486
281	Indust. inorganic chemicals	\$8,693	\$306,622	\$2,099,035	\$750,038	\$3,164,388	\$344,332	\$3,508,720
282	Plastics mat. & synthetics	\$5,357	\$367,011	\$2,693,915	\$835,017	\$3,901,299	\$487,000	\$4,388,299
283	Drugs	\$10,983	\$712,341	\$4,881,682	\$1,700,749	\$7,305,755	\$939,846	\$8,245,601
284	Soap, clnrs, & toilet goods	\$14,836	\$457,693	\$2,648,592	\$1,132,387	\$4,253,509	\$719,658	\$4,973,167
285	Paints & allied products	\$6,849	\$189,627	\$1,125,886	\$365,304	\$1,687,666	\$397,561	\$2,085,227
286	Indust. organic chemicals	\$7,882	\$423,075	\$3,297,923	\$840,591	\$4,569,471	\$396,770	\$4,966,241
287	Agricultural chemicals	\$5,235	\$135,812	\$893,979	\$295,265	\$1,330,290	\$176,220	\$1,506,510
289	Misc. chemical products	\$14,016	\$364,598	\$2,107,295	\$632,028	\$3,117,937	\$636,257	\$3,754,194
291	Petroleum refining	\$2,324	\$247,569	\$2,111,894	\$1,165,413	\$3,527,201	\$296,883	\$3,824,084
295	Asphalt paving & roofing mat.	\$6,714	\$123,234	\$760,392	\$534,403	\$1,424,742	\$317,260	\$1,742,001
299	Misc. pet. & coal prods	\$1,964	\$44,975	\$289,144	\$182,889	\$518,972	\$76,690	\$595,662
301	Tires and inner tubes	\$795	\$398,043	\$1,816,635	\$533,999	\$2,749,473	\$951,404	\$3,700,877
302	Rubber & plastics footwear	\$280	\$25,885	\$147,182	\$79,900	\$253,247	\$67,969	\$321,216
305	Hose, bltng, and gaskets	\$3,711	\$287,274	\$1,301,329	\$556,788	\$2,149,101	\$776,244	\$2,925,345
306	Fab. rubber prod., n.e.c.	\$8,078	\$538,299	\$2,419,814	\$1,030,324	\$3,996,514	\$1,480,995	\$5,477,509
308	Misc plastics, n.e.c.	\$61,313	\$2,943,333	\$15,241,306	\$6,318,264	\$24,564,216	\$7,959,889	\$32,524,105
311	Leather tan. & finishing	\$1,572	\$73,473	\$389,623	\$303,266	\$767,935	\$115,175	\$883,110
313	Footwear cut stock	\$321	\$7,756	\$47,843	\$32,420	\$88,340	\$12,652	\$100,992
314	Footwear, except rubber	\$1,668	\$143,027	\$754,727	\$845,138	\$1,744,560	\$257,376	\$2,001,936
315	Leather gloves & mittens	\$316	\$14,056	\$70,948	\$21,608	\$106,928	\$26,772	\$133,700
316	Luggage	\$945	\$24,258	\$167,941	\$123,403	\$316,548	\$39,749	\$356,297
317	Hndbags & prsnal leathr gds.	\$828	\$22,755	\$145,147	\$179,221	\$347,951	\$53,898	\$401,849
319	Leather goods, n.e.c.	\$1,299	\$33,883	\$193,758	\$138,565	\$367,504	\$73,029	\$440,533
321	Flat glass	\$385	\$96,829	\$423,991	\$167,108	\$688,313	\$290,691	\$979,004
322	Glass, pressed or blown	\$4,488	\$481,782	\$1,962,157	\$700,054	\$3,148,482	\$1,028,009	\$4,176,490
323	Prod. of purchased glass	\$8,990	\$362,565	\$1,556,345	\$762,019	\$2,689,919	\$961,169	\$3,651,089
324	Cement, hydraulic	\$1,202	\$76,968	\$456,106	\$165,754	\$700,031	\$203,517	\$903,547
325	Structural clay products	\$3,133	\$166,865	\$768,296	\$324,595	\$1,262,890	\$542,964	\$1,805,854
326	Pottery & related prods	\$5,795	\$244,496	\$991,631	\$466,752	\$1,708,674	\$747,750	\$2,456,424
327	Concrete & plast. prdcts	\$43,797	\$971,492	\$5,077,569	\$2,030,043	\$8,122,900	\$2,883,383	\$11,006,283
328	Cut stone & stone prods	\$4,909	\$85,304	\$398,444	\$143,405	\$632,062	\$216,118	\$848,181
329	Misc. nonmet. mineral prods.	\$7,373	\$336,233	\$1,717,979	\$796,369	\$2,857,954	\$928,504	\$3,786,458
331	Basic steel products	\$7,318	\$1,240,400	\$6,532,050	\$2,799,954	\$10,579,722	\$1,811,465	\$12,391,187
332	Iron and steel foundries	\$5,005	\$840,061	\$3,451,950	\$1,485,615	\$5,782,630	\$1,944,419	\$7,727,050
333	Primary nonfer. metals	\$963	\$166,492	\$880,140	\$386,435	\$1,434,030	\$284,749	\$1,718,779
334	Secondary nonfer. metals	\$1,290	\$80,063	\$404,165	\$182,397	\$667,915	\$170,715	\$838,630
335	Nonfer. rolling & drawing	\$6,276	\$853,464	\$3,999,413	\$1,713,911	\$6,573,065	\$1,445,074	\$8,018,138
336	Nonfer. foundries (cstngs)	\$7,565	\$500,196	\$2,184,084	\$937,174	\$3,629,019	\$1,084,850	\$4,713,869
339	Misc. primary metal prdcts	\$4,198	\$120,627	\$733,440	\$285,218	\$1,143,483	\$187,995	\$1,331,479
341	Met. cans & ship. containers	\$2,178	\$160,446	\$954,624	\$381,749	\$1,498,998	\$386,555	\$1,885,553
342	Cutlery, hndtls, & hardware	\$12,150	\$621,430	\$3,115,548	\$1,682,397	\$5,431,524	\$1,393,666	\$6,825,191
343	Plumbing & heating fixtures	\$3,091	\$312,675	\$1,193,346	\$633,839	\$2,142,951	\$854,040	\$2,996,991
344	Fab. struct. metal prdcts	\$56,999	\$1,837,200	\$10,212,496	\$5,052,945	\$17,159,640	\$4,845,115	\$22,004,754
345	Screw machine products	\$11,483	\$454,082	\$2,534,878	\$919,574	\$3,920,018	\$1,226,009	\$5,146,027
346	Met. forgings & stampings	\$17,399	\$1,557,380	\$7,024,442	\$3,414,725	\$12,013,946	\$3,655,488	\$15,669,434
347	Metal services, n.e.c.	\$23,744	\$515,811	\$2,937,435	\$982,639	\$4,459,629	\$1,367,553	\$5,827,182
348	Ordinance and access., n.e.c.	\$2,540	\$164,854	\$913,961	\$453,697	\$1,535,051	\$279,189	\$1,814,240
349	Misc. fab. metal products	\$31,923	\$1,255,921	\$6,822,257	\$3,288,392	\$11,398,493	\$3,226,235	\$14,624,727
351	Engines and turbines	\$2,085	\$427,395	\$2,021,296	\$841,208	\$3,291,985	\$822,415	\$4,114,400
352	Farm & garden machinery	\$10,664	\$559,351	\$2,578,271	\$1,395,958	\$4,544,244	\$1,002,812	\$5,547,056
353	Construct. & related mach.	\$15,722	\$923,123	\$4,625,925	\$2,587,324	\$8,152,095	\$2,104,568	\$10,256,663
354	Metalworking machinery	\$54,696	\$1,358,566	\$7,667,849	\$3,004,592	\$12,085,703	\$2,824,220	\$14,909,924
355	Special industry mach.	\$23,604	\$791,696	\$4,540,533	\$2,003,262	\$7,359,095	\$1,603,010	\$8,962,105
356	General indust. mach.	\$21,227	\$1,100,776	\$6,093,125	\$2,911,717	\$10,126,846	\$2,508,981	\$12,635,827
357	Computer & office equip.	\$13,751	\$749,585	\$4,876,439	\$2,239,656	\$7,879,432	\$1,009,045	\$8,888,477
358	Refrig. & serv. indust mach.	\$11,601	\$1,033,526	\$4,685,495	\$2,738,590	\$8,469,212	\$2,261,972	\$10,731,185
359	Industrial mach., n.e.c.	\$122,899	\$1,859,043	\$9,613,509	\$2,686,355	\$14,281,806	\$3,299,837	\$17,581,643
361	Elect. dist. equipment	\$4,693	\$256,976	\$1,344,960	\$477,969	\$2,084,598	\$406,340	\$2,490,937

TABLE VIII-2

## Total Cost of Compliance, by Provision of the Final Rule and 3-Digit SIC

SIC	Industry	Determination of Coverage by the Standard and Grandfather Status	Initial Employer Actions	Programmatic Elements	Job Fixes	SUBTOTAL (cost to society)	Work Restriction Protection	TOTAL (cost to employers)
362	Elect. indust. apparatus	\$13,552	\$754,618	\$3,418,998	\$1,090,690	\$5,277,858	\$1,084,770	\$6,362,629
363	Household appliances	\$2,645	\$621,484	\$2,350,652	\$915,422	\$3,890,204	\$957,481	\$4,847,685
364	Elct. lghtng & wire equip.	\$10,767	\$670,421	\$3,168,847	\$1,111,947	\$4,961,983	\$1,099,752	\$6,061,735
365	Household audio & vid. equip.	\$4,452	\$207,201	\$953,892	\$344,385	\$1,509,930	\$307,849	\$1,817,780
366	Communications equipment	\$13,530	\$647,168	\$4,627,855	\$1,578,921	\$6,867,474	\$680,777	\$7,548,252
367	Electric compnnts & access.	\$35,756	\$1,492,089	\$10,097,206	\$3,434,881	\$15,059,932	\$1,889,014	\$16,948,945
369	Misc. elect. equipment	\$8,917	\$683,419	\$3,235,519	\$1,100,278	\$5,028,133	\$1,101,842	\$6,129,975
371	Motor vehicles & equipt.	\$31,675	\$8,467,592	\$28,373,297	\$3,172,775	\$40,045,340	\$7,514,490	\$47,559,830
372	Aircraft and parts	\$12,833	\$1,664,662	\$12,039,124	\$1,321,782	\$15,038,401	\$1,133,605	\$16,172,006
373	Ship, boat bldng and repair	\$14,670	\$950,348	\$2,205,130	\$218,915	\$3,389,062	\$936,226	\$4,325,288
374	Railroad equipment	\$965	\$154,492	\$913,690	\$153,685	\$1,222,831	\$178,975	\$1,401,806
375	Motorcycles & bicycles	\$2,131	\$96,177	\$483,804	\$63,834	\$645,947	\$82,347	\$728,294
376	Guided missiles	\$634	\$124,006	\$1,969,104	\$190,859	\$2,284,603	\$91,839	\$2,376,442
379	Misc. transportation equip.	\$5,481	\$239,854	\$1,181,693	\$235,047	\$1,662,075	\$265,396	\$1,927,471
381	Srch & navigation equipment	\$4,408	\$452,314	\$3,290,313	\$1,199,299	\$4,946,334	\$384,489	\$5,330,824
382	Meas. & contrllng devices	\$27,290	\$940,171	\$4,835,510	\$2,075,917	\$7,878,889	\$1,233,858	\$9,112,747
384	Medical instrmnts & supplies	\$26,280	\$854,710	\$4,510,790	\$2,399,357	\$7,791,136	\$1,101,303	\$8,892,440
385	Ophthalmic goods	\$3,055	\$93,564	\$426,381	\$216,660	\$739,660	\$143,080	\$882,740
386	Photo. equip. & supplies	\$3,425	\$246,659	\$1,262,406	\$565,678	\$2,078,167	\$354,552	\$2,432,719
387	Watches, clocks, & parts	\$646	\$13,803	\$73,993	\$52,079	\$140,522	\$20,118	\$160,640
391	Jwlry, slvrwre, and plate	\$12,693	\$177,563	\$742,080	\$393,136	\$1,325,472	\$219,739	\$1,545,211
393	Musical instruments	\$2,351	\$66,870	\$263,887	\$142,370	\$475,478	\$128,325	\$603,803
394	Toys and sporting goods	\$17,530	\$553,613	\$2,072,474	\$1,070,936	\$3,714,552	\$937,139	\$4,651,691
395	Office and art supplies	\$5,957	\$108,795	\$499,598	\$247,340	\$861,691	\$136,709	\$998,400
396	Costume jewelry & notions	\$4,560	\$66,823	\$318,357	\$179,385	\$569,124	\$102,987	\$672,112
399	Misc. manufactures	\$35,192	\$658,528	\$3,156,931	\$1,561,055	\$5,411,707	\$1,275,903	\$6,687,609
411	Local & suburban trans.	\$31,705	\$879,339	\$5,498,267	\$9,357,380	\$15,766,692	\$2,758,501	\$18,525,193
412	Taxicabs	\$9,024	\$104,907	\$386,764	\$1,040,205	\$1,540,900	\$91,676	\$1,632,576
413	Intercty & rural bus trans.	\$2,205	\$88,396	\$549,307	\$1,173,800	\$1,813,708	\$187,589	\$2,001,297
414	Bus charter service	\$4,506	\$84,789	\$452,518	\$789,102	\$1,330,914	\$154,912	\$1,485,827
415	School buses	\$10,004	\$323,422	\$1,819,403	\$5,115,900	\$7,268,729	\$587,532	\$7,856,261
417	Bus terminals	\$261	\$3,357	\$19,729	\$10,012	\$33,359	\$7,297	\$40,656
421	Trking & Courier Service	\$474,111	\$8,569,105	\$48,168,979	\$92,020,966	\$149,233,161	\$14,075,047	\$163,308,208
422	Pub. warehousing & storage	\$54,342	\$836,068	\$5,016,103	\$4,699,375	\$10,605,888	\$2,053,386	\$12,659,274
423	Trucking terminal fac.	\$367	\$5,982	\$35,924	\$36,294	\$78,566	\$15,037	\$93,603
431	Postal Service	\$154,767	\$4,837,885	\$25,246,411	\$20,826,211	\$51,065,275	\$8,149,885	\$59,215,160
451	Air trans., scheduled	\$35,179	\$7,051,190	\$23,793,281	\$24,716,741	\$55,596,390	\$22,843,978	\$78,440,368
452	Air trans., nonsched.	\$6,595	\$140,463	\$608,002	\$607,370	\$1,362,430	\$246,330	\$1,608,760
458	Airports and services	\$14,855	\$536,617	\$2,733,673	\$3,538,770	\$6,823,916	\$1,363,095	\$8,187,010
461	Pipelines, except natural gas	\$5,679	\$119,733	\$756,192	\$408,326	\$1,289,930	\$283,775	\$1,573,705
472	Pass. trans. arrangements	\$106,795	\$1,084,760	\$1,765,395	\$1,387,235	\$4,344,185	\$368,516	\$4,712,700
473	Freight trans. arrangements	\$60,804	\$744,112	\$3,663,401	\$3,566,503	\$8,034,819	\$1,036,172	\$9,070,991
474	Rental of railroad cars	\$532	\$8,785	\$47,357	\$34,380	\$91,054	\$8,063	\$99,116
478	Misc. trans. services	\$11,991	\$218,055	\$1,410,478	\$1,410,264	\$3,050,789	\$492,979	\$3,543,768
481	Telephone communication	\$165,186	\$2,540,678	\$9,641,669	\$8,223,518	\$20,571,051	\$4,726,001	\$25,297,052
482	Telegrph & other comm.	\$2,136	\$20,286	\$46,871	\$29,169	\$98,462	\$27,206	\$125,668
483	Radio & TV broadcasting	\$42,304	\$506,201	\$1,452,059	\$432,651	\$2,433,216	\$559,575	\$2,992,791
484	Cable & othr pay TV services	\$21,122	\$410,533	\$1,644,018	\$1,482,638	\$3,558,311	\$1,421,791	\$4,980,102
489	Communication serv., n.e.c.	\$4,564	\$50,317	\$122,310	\$68,144	\$245,335	\$65,679	\$311,015
491	Electric services	\$38,267	\$1,195,172	\$4,952,071	\$3,462,565	\$9,648,075	\$2,986,488	\$12,634,563
492	Gas product. & distribution	\$24,958	\$523,602	\$1,936,255	\$1,294,042	\$3,778,856	\$1,326,840	\$5,105,696
493	Comb. utility services	\$9,442	\$456,548	\$2,209,017	\$1,856,878	\$4,531,885	\$1,039,235	\$5,571,120
494	Water supply	\$16,700	\$161,319	\$401,591	\$168,571	\$748,180	\$315,372	\$1,063,552
495	Sanitary services	\$34,556	\$784,892	\$2,200,598	\$1,607,906	\$4,627,952	\$2,623,475	\$7,251,426
496	Steam & air-cond. supplies	\$316	\$4,302	\$15,117	\$5,679	\$25,415	\$10,406	\$35,821
497	Irrigation systems	\$1,678	\$13,132	\$19,939	\$7,010	\$41,758	\$12,912	\$54,670
501	Motor vehicles	\$199,317	\$2,736,078	\$14,149,232	\$9,682,724	\$26,767,352	\$5,987,351	\$32,754,703
502	Furn. & homefurnishings	\$81,600	\$1,050,723	\$5,189,736	\$2,967,076	\$9,289,135	\$2,212,121	\$11,501,256
503	Lumber & construct. mat.	\$100,280	\$1,678,744	\$9,645,199	\$5,895,138	\$17,319,362	\$5,326,062	\$22,645,424
504	Prof. & commercial equip.	\$253,900	\$3,881,705	\$19,189,460	\$11,549,192	\$34,874,258	\$5,350,277	\$40,224,535
505	Met. & minerals, except pet.	\$52,415	\$887,029	\$4,984,758	\$3,197,406	\$9,121,609	\$2,277,944	\$11,399,553
506	Electrical goods	\$151,874	\$2,361,944	\$12,006,584	\$7,227,119	\$21,747,520	\$4,371,686	\$26,119,207
507	Hardware supplies	\$118,372	\$1,694,420	\$9,189,629	\$4,802,046	\$15,804,467	\$4,223,748	\$20,028,215



TABLE VIII-2

## Total Cost of Compliance, by Provision of the Final Rule and 3-Digit SIC

SIC	Industry	Determination of Coverage by the Standard and Grandfather Status	Initial Employer Actions	Programmatic Elements	Job Fixes	SUBTOTAL (cost to society)	Work Restriction Protection	TOTAL (cost to employers)
508	Mach., equip., & supplies	\$368,197	\$4,779,641	\$23,884,205	\$12,382,614	\$41,414,657	\$9,352,640	\$50,767,296
509	Misc. durable goods	\$183,472	\$2,042,870	\$8,892,024	\$5,951,886	\$17,070,251	\$3,626,502	\$20,696,753
511	Paper and paper products	\$80,730	\$1,220,386	\$6,366,147	\$5,819,268	\$13,486,531	\$1,796,301	\$15,282,832
512	Drugs, propriet., & sundries	\$47,345	\$893,149	\$4,996,415	\$3,468,063	\$9,404,972	\$1,177,883	\$10,582,855
513	Apparel and notions	\$118,459	\$1,282,074	\$5,227,549	\$2,828,796	\$9,456,877	\$1,677,778	\$11,134,655
514	Groceries & related products	\$204,015	\$4,794,617	\$26,365,537	\$21,322,708	\$52,686,876	\$13,653,303	\$66,340,179
515	Farm-prod. raw materials	\$37,622	\$393,071	\$1,346,666	\$729,898	\$2,507,258	\$534,182	\$3,041,440
516	Chemicals & allied prods	\$80,164	\$978,067	\$4,446,009	\$2,602,540	\$8,106,780	\$1,387,745	\$9,494,525
517	Petrol. & petrol. prods	\$58,936	\$752,204	\$3,657,551	\$2,607,967	\$7,076,658	\$1,410,542	\$8,487,200
518	Beer, wine, & dist. bev.	\$24,810	\$982,828	\$5,367,795	\$3,985,910	\$10,361,342	\$3,301,879	\$13,663,221
519	Misc. nondurable goods	\$255,925	\$2,915,918	\$11,508,351	\$9,825,998	\$24,506,193	\$4,364,463	\$28,870,656
521	Lumber & other bldg mat.	\$96,047	\$2,318,542	\$13,414,817	\$11,382,823	\$27,212,229	\$7,755,463	\$34,967,693
523	Paint, glass, wallpaper str	\$23,993	\$275,025	\$1,398,035	\$836,156	\$2,533,209	\$764,321	\$3,297,530
525	Hardware stores	\$42,397	\$516,825	\$2,543,280	\$1,579,168	\$4,681,670	\$1,308,045	\$5,989,715
526	Retail nurseries and gardens	\$37,431	\$421,793	\$2,004,890	\$1,796,097	\$4,260,211	\$987,917	\$5,248,128
527	Mobile home dealers	\$23,271	\$291,429	\$1,582,135	\$930,618	\$2,827,454	\$663,488	\$3,490,941
531	Department stores	\$26,134	\$4,758,318	\$27,485,467	\$30,203,589	\$62,473,509	\$26,625,089	\$89,098,598
533	Variety stores	\$32,847	\$492,101	\$3,004,259	\$979,567	\$4,508,774	\$1,967,347	\$6,476,122
539	Misc. gen. merchandise str.	\$57,689	\$951,668	\$4,942,827	\$4,034,638	\$9,986,823	\$2,165,910	\$12,152,733
541	Grocery stores	\$513,744	\$10,906,931	\$57,931,536	\$43,984,501	\$113,336,712	\$21,441,547	\$134,778,259
542	Meat and fish markets	\$36,063	\$325,618	\$1,048,864	\$659,674	\$2,070,219	\$279,086	\$2,349,305
543	Fruit & vegetable markets	\$15,318	\$128,681	\$311,558	\$137,018	\$592,576	\$80,225	\$672,801
544	Candy, nut, & confctnry str	\$21,735	\$181,309	\$425,977	\$140,738	\$769,760	\$104,329	\$874,089
545	Dairy products stores	\$11,688	\$95,140	\$191,282	\$67,119	\$365,230	\$42,855	\$408,085
546	Retail bakeries	\$92,386	\$829,425	\$2,499,612	\$927,185	\$4,348,608	\$698,732	\$5,047,340
549	Misc. food stores	\$45,396	\$373,044	\$828,107	\$278,429	\$1,524,975	\$202,248	\$1,727,223
551	New and used car dealers	\$102,887	\$3,973,879	\$23,828,713	\$24,194,669	\$52,100,148	\$8,877,486	\$60,977,634
552	Used car dealers	\$100,614	\$767,479	\$578,664	\$287,086	\$1,733,843	\$157,960	\$1,891,804
553	Auto & home supply stores	\$148,247	\$1,716,003	\$8,082,708	\$7,365,986	\$17,312,944	\$3,686,269	\$20,999,213
554	Gas service stations	\$312,347	\$3,017,423	\$9,817,686	\$6,806,970	\$19,954,426	\$4,440,062	\$24,394,488
555	Boat dealers	\$23,229	\$240,654	\$1,013,088	\$647,812	\$1,924,783	\$367,148	\$2,291,931
556	Rec. vehicle dealers	\$13,728	\$183,300	\$968,055	\$666,521	\$1,831,603	\$385,491	\$2,217,094
557	Motorcycle dealers	\$17,349	\$158,582	\$153,829	\$97,087	\$426,846	\$37,524	\$464,370
559	Auto dealers, n.e.c.	\$5,656	\$45,444	\$39,719	\$25,522	\$116,341	\$10,337	\$126,679
561	Men's & boys' clothing str	\$38,083	\$387,387	\$881,897	\$458,056	\$1,765,423	\$371,112	\$2,136,535
562	Women's clothing stores	\$179,801	\$1,547,208	\$2,567,004	\$1,081,052	\$5,375,065	\$817,737	\$6,192,802
563	Wm's access & specialty str	\$39,634	\$311,721	\$405,770	\$140,895	\$898,020	\$129,618	\$1,027,638
564	Chldrn's & infants' wear str	\$23,770	\$212,347	\$457,426	\$314,995	\$1,008,539	\$145,279	\$1,153,818
565	Family clothing stores	\$82,550	\$1,190,304	\$6,372,761	\$4,098,718	\$11,744,333	\$2,459,472	\$14,203,805
566	Shoe stores	\$171,469	\$1,331,150	\$2,427,966	\$867,596	\$4,798,180	\$739,159	\$5,537,339
569	Misc. apparel stores	\$43,235	\$334,044	\$332,132	\$119,978	\$829,388	\$105,855	\$935,244
571	Furniture & homefurnishng str	\$259,944	\$2,969,361	\$13,896,392	\$9,666,207	\$26,791,904	\$5,863,770	\$32,655,674
572	Household appliance str	\$56,657	\$556,743	\$2,245,505	\$1,553,847	\$4,412,751	\$673,118	\$5,085,868
573	Radio, TV, & compr str	\$172,444	\$1,838,319	\$5,947,343	\$4,045,186	\$12,003,294	\$1,914,867	\$13,918,160
581	Eating & drinking places	\$2,095,210	\$22,504,303	\$86,715,409	\$35,641,406	\$146,956,328	\$22,837,677	\$169,794,005
591	Drug stores	\$190,746	\$2,267,973	\$7,985,455	\$5,683,952	\$16,128,126	\$2,520,539	\$18,648,665
592	Liquor stores	\$78,688	\$666,783	\$655,707	\$187,680	\$1,588,858	\$262,411	\$1,851,269
593	Used merchandise stores	\$105,215	\$853,025	\$2,192,949	\$1,279,547	\$4,430,735	\$825,297	\$5,256,032
594	Misc. shopping goods str.	\$544,356	\$4,846,691	\$13,806,775	\$8,051,847	\$27,249,668	\$5,065,009	\$32,314,677
596	Nonstore retailers	\$149,352	\$2,067,192	\$10,324,897	\$9,270,898	\$21,812,338	\$3,595,431	\$25,407,770
598	Fuel dealers	\$36,059	\$461,740	\$1,930,478	\$2,052,933	\$4,481,211	\$777,947	\$5,259,158
599	Retail stores, n.e.c.	\$384,242	\$3,176,539	\$4,775,100	\$4,041,095	\$12,376,976	\$1,456,614	\$13,833,591
601	Central res. depository	\$517	\$73,561	\$319,896	\$80,473	\$474,447	\$57,127	\$531,574
602	Commercial banks	\$342,919	\$4,660,906	\$15,908,940	\$3,759,259	\$24,672,024	\$1,107,229	\$25,779,253
603	Savings institutions	\$84,279	\$970,187	\$2,691,145	\$397,188	\$4,142,800	\$188,748	\$4,331,547
606	Credit unions	\$59,059	\$657,419	\$1,781,402	\$292,134	\$2,790,014	\$212,667	\$3,002,681
608	Foreign banking	\$5,154	\$83,205	\$263,402	\$3,306	\$355,067	\$919	\$355,986
609	Banking-related functions	\$30,177	\$325,592	\$886,816	\$197,889	\$1,440,474	\$88,070	\$1,528,544
611	Federal credit agencies	\$6,727	\$88,272	\$246,743	\$27,659	\$369,402	\$7,111	\$376,512
614	Personal cred. institutions	\$101,880	\$932,402	\$1,704,470	\$160,249	\$2,899,000	\$43,012	\$2,942,012
615	Business cred. institutions	\$32,447	\$438,821	\$1,446,035	\$267,294	\$2,184,597	\$76,526	\$2,261,122
616	Mortgage bankers & brokers	\$116,138	\$1,202,703	\$2,809,569	\$348,486	\$4,476,897	\$158,378	\$4,635,274
621	Security brokers & dealers	\$116,984	\$1,903,107	\$5,767,549	\$773,864	\$8,561,504	\$158,272	\$8,719,776

TABLE VIII-2

## Total Cost of Compliance, by Provision of the Final Rule and 3-Digit SIC

SIC	Industry	Determination of Coverage by the Standard and Grandfather Status	Initial Employer Actions	Programmatic Elements	Job Fixes	SUBTOTAL (cost to society)	Work Restriction Protection	TOTAL (cost to employers)
622	Commodity contracts brokers	\$6,039	\$73,199	\$144,925	\$0	\$224,162	\$0	\$224,162
623	Security & commod. exchanges	\$536	\$27,654	\$126,764	\$25,663	\$180,618	\$7,244	\$187,861
628	Security & commod. services	\$111,903	\$1,064,686	\$1,920,203	\$178,167	\$3,274,960	\$37,005	\$3,311,965
631	Life insurance	\$76,996	\$1,845,142	\$8,161,573	\$1,983,456	\$12,067,167	\$288,300	\$12,355,467
632	Medical & health insur.	\$18,029	\$1,036,549	\$4,808,503	\$1,616,296	\$7,479,377	\$442,124	\$7,921,501
633	Fire, marine, & caslty ins.	\$124,916	\$2,683,416	\$10,636,225	\$1,856,866	\$15,301,422	\$680,040	\$15,981,462
635	Surety insurance	\$3,552	\$49,363	\$159,132	\$27,381	\$239,428	\$8,508	\$247,936
636	Title insurance	\$10,984	\$181,641	\$644,715	\$117,528	\$954,868	\$64,360	\$1,019,228
637	Pension and health funds	\$15,059	\$178,251	\$477,404	\$61,045	\$731,759	\$25,787	\$757,546
639	Ins. carriers, n.e.c.	\$1,338	\$19,258	\$61,550	\$9,811	\$91,957	\$5,364	\$97,321
641	Insurance agents	\$647,355	\$5,667,437	\$9,170,808	\$763,023	\$16,248,624	\$436,502	\$16,685,126
651	Real estate operators	\$376,329	\$3,889,293	\$9,806,761	\$3,135,865	\$17,208,248	\$1,484,820	\$18,693,068
653	RE agents and managers	\$547,121	\$5,406,985	\$11,967,801	\$3,446,138	\$21,368,045	\$1,051,004	\$22,419,049
654	Title abstract offices	\$20,768	\$214,891	\$437,999	\$25,513	\$699,171	\$26,201	\$725,371
655	Subdividers & developrs	\$69,426	\$810,581	\$2,291,421	\$999,106	\$4,170,534	\$369,463	\$4,539,996
671	Holding offices	\$57,038	\$797,037	\$2,602,016	\$730,448	\$4,186,539	\$155,625	\$4,342,164
672	Investment offices	\$4,217	\$89,445	\$351,813	\$151,246	\$596,721	\$11,791	\$608,512
673	Trusts	\$42,342	\$410,614	\$867,929	\$174,395	\$1,495,281	\$63,585	\$1,558,865
679	Miscellaneous investing	\$40,988	\$395,538	\$948,082	\$209,780	\$1,594,389	\$80,080	\$1,674,469
701	Hotels and motels	\$165,678	\$4,578,542	\$27,058,668	\$19,917,858	\$51,720,746	\$9,954,201	\$61,674,948
702	Rooming & boarding houses	\$7,444	\$56,604	\$55,320	\$12,354	\$131,722	\$8,021	\$139,743
703	Camps and rec. vehicle parks	\$15,009	\$133,584	\$154,919	\$86,649	\$390,160	\$30,446	\$420,606
704	Membership-basis org. hotels	\$11,046	\$82,827	\$78,882	\$19,084	\$191,839	\$11,022	\$202,861
721	Laundry & garment svcs	\$195,263	\$2,035,420	\$9,127,876	\$4,801,815	\$16,160,374	\$4,440,040	\$20,600,413
722	Photo studios, portrait	\$36,224	\$320,556	\$833,701	\$677,906	\$1,868,387	\$181,148	\$2,049,535
723	Beauty shops	\$191,194	\$1,682,771	\$2,357,653	\$829,755	\$5,061,373	\$566,039	\$5,627,412
724	Barber shops	\$20,621	\$152,738	\$306,468	\$90,745	\$570,572	\$84,274	\$654,847
725	Shoe repair	\$10,157	\$72,556	\$122,831	\$60,316	\$265,860	\$34,408	\$300,268
726	Fun. service and crematories	\$64,349	\$538,340	\$1,175,493	\$603,434	\$2,381,616	\$284,746	\$2,666,361
729	Misc personal services.	\$127,577	\$1,082,588	\$1,167,796	\$598,649	\$2,976,610	\$114,649	\$3,091,259
731	Advertising	\$90,129	\$1,229,047	\$4,407,958	\$1,607,005	\$7,334,140	\$346,006	\$7,680,146
732	Credit report. & collection	\$39,407	\$468,453	\$1,686,618	\$358,665	\$2,553,144	\$173,623	\$2,726,767
733	Mailing, reprod, steno., serv	\$145,007	\$1,550,343	\$5,198,639	\$2,484,705	\$9,378,694	\$900,986	\$10,279,680
734	Services to buildings	\$206,294	\$2,945,347	\$12,847,705	\$2,472,147	\$18,471,493	\$3,347,075	\$21,818,569
735	Misc. equipt. rental	\$91,341	\$1,116,432	\$4,366,235	\$3,079,884	\$8,653,891	\$892,842	\$9,546,733
736	Pers. supply services	\$137,575	\$6,306,756	\$37,298,132	\$35,295,716	\$79,038,179	\$3,431,713	\$82,469,891
737	Comptr & data proc. services	\$469,811	\$6,794,327	\$23,909,335	\$6,545,429	\$37,718,903	\$1,267,004	\$38,985,907
738	Misc. business services	\$277,937	\$4,088,846	\$17,217,271	\$9,519,201	\$31,103,255	\$2,536,666	\$33,639,921
751	Auto rentals, no drivers	\$58,976	\$662,777	\$2,655,497	\$2,659,082	\$6,036,333	\$509,081	\$6,545,414
752	Automobile parking	\$29,212	\$260,778	\$600,376	\$718,520	\$1,608,886	\$164,198	\$1,773,084
753	Automotive repair shops	\$600,485	\$4,982,777	\$11,845,914	\$7,933,858	\$25,363,033	\$2,814,592	\$28,177,625
754	Automotive serv., exc repair	\$86,397	\$942,031	\$4,223,375	\$3,359,926	\$8,611,728	\$1,591,359	\$10,203,088
762	Electrical repair shops	\$78,797	\$830,539	\$2,955,619	\$2,677,290	\$6,542,245	\$745,888	\$7,288,133
763	Watch and jewelry repair	\$8,273	\$64,212	\$134,971	\$66,847	\$274,303	\$32,534	\$306,837
764	Reupholstery & furn. repair	\$31,361	\$238,519	\$418,835	\$217,220	\$905,934	\$131,110	\$1,037,044
769	Misc. repair shops	\$152,081	\$1,590,294	\$5,966,360	\$5,208,233	\$12,916,969	\$1,531,232	\$14,448,201
781	Motion picture production	\$73,503	\$1,534,398	\$8,091,912	\$3,789,060	\$13,488,873	\$1,500,575	\$14,989,448
782	Motion picture dist.	\$6,166	\$125,308	\$663,561	\$279,892	\$1,074,927	\$208,586	\$1,283,513
783	Motion picture theaters	\$15,217	\$456,773	\$2,961,215	\$914,394	\$4,347,599	\$1,235,374	\$5,582,973
784	Video tape rental	\$81,980	\$807,713	\$3,651,598	\$323,192	\$4,864,483	\$1,354,524	\$6,219,007
791	Dance studios & schools	\$26,213	\$194,685	\$167,461	\$34,384	\$422,744	\$23,748	\$446,492
792	Pducers, orch., entertainers	\$62,318	\$653,097	\$2,228,300	\$2,068,684	\$5,012,399	\$568,798	\$5,581,198
793	Bowling centers	\$26,287	\$276,069	\$897,600	\$420,128	\$1,620,084	\$204,510	\$1,824,594
794	Commercial sports	\$26,488	\$447,160	\$2,257,642	\$1,633,293	\$4,364,582	\$621,889	\$4,986,471
799	Misc. recreation services	\$220,295	\$3,347,796	\$17,111,737	\$16,460,615	\$37,140,443	\$5,140,130	\$42,280,573
801	Offices of medical doctors	\$795,650	\$9,257,956	\$38,345,670	\$18,055,369	\$66,454,646	\$4,696,759	\$71,151,405
802	Dentists offices and clinics	\$662,268	\$5,591,068	\$12,773,339	\$1,724,053	\$20,750,727	\$1,380,162	\$22,130,890
803	Osteopathic physicians	\$29,011	\$296,513	\$746,415	\$114,295	\$1,186,233	\$66,915	\$1,253,148
804	Other health practitioners	\$306,635	\$2,833,281	\$9,332,064	\$3,264,101	\$15,736,081	\$2,174,376	\$17,910,457
805	Nursing & personal care fac.	\$82,676	\$7,669,934	\$47,772,674	\$20,940,175	\$76,465,458	\$18,724,302	\$95,189,760
806	Hospitals	\$34,732	\$17,089,022	\$162,738,633	\$61,252,553	\$241,114,940	\$23,055,478	\$264,170,417
807	Med. & dental labs	\$75,417	\$968,029	\$4,658,002	\$2,441,206	\$8,142,653	\$526,241	\$8,668,894
808	Home hlth care services	\$61,518	\$2,958,485	\$20,377,584	\$13,837,536	\$37,235,124	\$5,503,950	\$42,739,074

TABLE VIII-2

## Total Cost of Compliance, by Provision of the Final Rule and 3-Digit SIC

SIC	Industry	Determination of Coverage by the Standard and Grandfather Status	Initial Employer Actions	Programmatic Elements	Job Fixes	SUBTOTAL (cost to society)	Work Restriction Protection	TOTAL (cost to employers)
809	Hlth & allied serv., n.e.c.	\$89,537	\$1,639,130	\$9,661,488	\$5,018,567	\$16,408,721	\$1,495,420	\$17,904,141
811	Legal services	\$865,868	\$7,500,019	\$17,799,819	\$3,180,297	\$29,346,004	\$1,489,038	\$30,835,042
821	Elem. & secondary schools	\$96,629	\$2,075,207	\$12,120,163	\$5,030,195	\$19,322,194	\$978,016	\$20,300,210
822	Colleges & universities	\$17,833	\$3,173,736	\$28,871,072	\$14,204,017	\$46,266,659	\$1,400,722	\$47,667,382
823	Libraries	\$10,322	\$112,564	\$346,834	\$49,032	\$518,752	\$19,773	\$538,525
824	Vocational schools	\$30,216	\$361,855	\$1,218,638	\$245,080	\$1,855,789	\$74,914	\$1,930,703
829	Schools, n.e.c.	\$69,161	\$695,829	\$1,895,912	\$325,725	\$2,986,627	\$111,586	\$3,098,213
832	Individual & fam. services	\$154,198	\$2,154,127	\$10,986,627	\$7,634,074	\$20,929,025	\$3,130,158	\$24,059,183
833	Job train. & related serv.	\$29,400	\$670,342	\$4,432,233	\$4,437,946	\$9,569,922	\$975,169	\$10,545,092
835	Child day care services	\$163,334	\$1,677,069	\$6,415,389	\$2,415,378	\$10,671,170	\$1,725,903	\$12,397,073
836	Residential care	\$94,489	\$2,025,851	\$11,249,253	\$8,010,052	\$21,379,646	\$4,888,065	\$26,267,710
839	Social services, n.e.c.	\$55,314	\$705,695	\$3,366,520	\$2,231,129	\$6,358,657	\$596,245	\$6,954,902
841	Museums & art galleries	\$18,517	\$239,409	\$1,183,086	\$433,212	\$1,874,224	\$213,889	\$2,088,113
842	Bot. & zoolog. gardens	\$2,339	\$49,664	\$300,060	\$252,528	\$604,590	\$68,789	\$673,379
861	Business associations	\$82,066	\$752,951	\$1,998,739	\$360,668	\$3,194,425	\$129,757	\$3,324,182
862	Prof. organizations	\$33,822	\$346,623	\$975,849	\$154,935	\$1,511,229	\$51,718	\$1,562,948
863	Labor organizations	\$58,381	\$720,579	\$2,122,658	\$258,261	\$3,159,879	\$97,014	\$3,256,892
864	Civic & social assoc.	\$109,671	\$1,554,594	\$6,898,349	\$2,327,095	\$10,889,709	\$926,225	\$11,815,935
865	Political organizations	\$11,821	\$99,819	\$251,084	\$42,249	\$404,974	\$35,547	\$440,520
866	Religious organizations	\$661,023	\$6,971,356	\$17,662,862	\$2,235,046	\$27,530,288	\$483,101	\$28,013,389
869	Membership orgs., n.e.c.	\$28,367	\$435,535	\$2,186,591	\$1,294,857	\$3,945,350	\$257,326	\$4,202,676
871	Eng. and arch. services	\$436,740	\$4,977,286	\$19,558,333	\$6,085,276	\$31,057,635	\$1,172,366	\$32,230,001
872	Acctng, auditng, & bkeeping	\$479,769	\$4,330,483	\$14,187,721	\$4,852,167	\$23,850,139	\$1,078,937	\$24,929,076
873	Research & testing services	\$99,803	\$1,974,139	\$12,323,854	\$5,138,989	\$19,536,785	\$1,271,837	\$20,808,622
874	Management & pub. relations	\$438,214	\$4,985,011	\$21,062,857	\$11,488,746	\$37,974,829	\$1,900,903	\$39,875,732
899	Services, n.e.c.	\$80,432	\$868,169	\$3,130,239	\$1,197,299	\$5,276,139	\$669,565	\$5,945,705
	Subtotal	\$25,614,221	\$417,663,629	\$1,882,097,229	\$1,089,989,195	\$3,415,364,275	\$564,442,929	\$3,979,807,204
	State & Local Government	\$829,715	\$36,920,178	\$299,429,246	\$159,093,322	\$496,272,461	\$62,264,526	\$558,536,987
	TOTAL (including government)	\$26,443,937	\$454,583,807	\$2,181,526,475	\$1,249,082,518	\$3,911,636,736	\$626,707,455	\$4,538,344,191

Source: OSHA Office of Regulatory Analysis, U.S. Department of Labor

The programmatic elements of the standard have annualized costs of \$2.2 billion. In addition, the provision requiring employers to control jobs that have been found to have MSD hazards, has costs of \$1.3 billion per year. Four of the industries covered by the standard have costs of more than \$100 million per year: hospitals (SIC 806); eating and drinking places (SIC 581); trucking and courier services (SIC 421) and grocery stores (SIC 541).

Estimates of the costs of job controls are presented as net costs, because OSHA has taken the benefits employers often accrue from productivity improvements associated with job controls as offsets to the costs of job control. OSHA estimates that the labor savings (productivity improvements) provided by the job controls the standard will require will amount to approximately \$700 million per year in annualized savings.<sup>2</sup> OSHA believes that many ergonomic interventions improve productivity, either because they reduce employee fatigue and relieve muscle pain (which means that the employee will do more work in less time), or because they involve automating portions of jobs in ways that can be expected to improve productivity. In addition to such direct effects on productivity, ergonomic interventions frequently offset the employers' cost for controls by:

- Reducing absenteeism because a worker is less likely to take time off to recover from muscle soreness, fatigue, etc.;
- Reducing turnover, particularly since new hires are more likely to find an ergonomically designed job within their physical capacity;
- Improving product quality because fewer errors are made when processes are more mechanized and demand less physical effort.

These positive productivity impacts are attested to by the experience of many employers (see the productivity tables in Chapter V of the Final Economic Analysis). OSHA's 1993 ergonomics survey of general industry employers found that 30 percent of those employers who had implemented ergonomics controls reported that their ergonomics programs had had measurable positive impacts on productivity. On average, these employers (including the few employers who reported that their controls had negative impacts on productivity)

reported a weighted average productivity improvement of 7 percent per ergonomic intervention. The cost estimates presented in this Final Economic Analysis differ appreciably from those presented in the Preliminary Economic Analysis. These changes are described in greater detail in Chapter V of this final analysis, but the most important changes and the reasons for them are the following:

- The inclusion of a clearly defined action trigger in the final standard has served to significantly reduce the costs of the standard. In the preliminary economic analysis, OSHA assumed that all MSDs in jobs that had not yet been fixed would require job controls and other actions as appropriate. Under the final rule (and thus in this final analysis), many reports of MSDs will not trigger further action because they would not meet the standard's screen. Thus the screen serves to significantly reduce the costs of the standard.

- In order to ensure that the economic analysis reflects the costs associated with implementing ergonomics programs in practice, the costs for most program elements have been revised upward to account for the extensive comments in the record on the experience of firms that have implemented ergonomics programs. On the other hand, the estimated costs to general industry employers in establishments that do not have MSDs have been reduced, since the final standard, unlike the proposal, no longer has a requirement for all establishments with manufacturing or manual handling jobs to have a basic program.

- Work restriction protection (WRP) costs are substantially reduced overall, although the per-case costs have been increased. The overall decrease in WRP costs is a result of the reduced length of WRP coverage (from 6 to 3 months) and the effects of the screen; WRP will only be paid under the final rule to workers in jobs that meet the action trigger. In addition, OSHA agrees with comments in the record pointing out that OSHA's preliminary WRP cost estimates did not accurately reflect the full costs to the employer of WRP wage replacement, and the final WRP costs have been adjusted accordingly.

- OSHA's cost estimates in the final rule also take account of the increase in the number of MSDs the Agency believes will be reported to employers as a result of the encouragement to report provided by WRP and the inclusion of persistent signs and symptoms in the standard's definition of an MSD incident.

OSHA has not significantly changed its estimates of the unit costs of job

controls since the proposal. OSHA believes, after a review of the comments and cost estimates in the record and an analysis of the controls needed to achieve the final rule's endpoint, that its initial costs-of-control estimates are reasonable.

#### F. Economic Feasibility (Chapter VI)

The OSH Act requires the Agency to set standards that are feasible, both technologically and economically. To demonstrate that a standard is feasible, the courts have held that OSHA must "construct a reasonable estimate of compliance costs and demonstrate a reasonable likelihood that these costs will not threaten the existence or competitive structure of an industry" [*United Steelworkers of America, AFL-CIO-CLC v. Marshall* (the "Lead" decision)], 647 F.2d 1189 (DC Cir. 1980).

OSHA's analysis of economic feasibility was conducted on an establishment basis. For each affected industry, estimates of per-establishment annualized compliance costs were compared with per-establishment estimates of revenues and per-establishment estimates of profits, using two worst-case assumptions about the ability of employers to pass the costs of compliance through to their customers: The no cost passthrough assumption and the full cost passthrough assumption. Based on the results of these comparisons, which define the universe of potential impacts of the ergonomics program standard, OSHA then assessed the final standard's economic feasibility for establishments in all covered industries.

OSHA assumed that the establishments falling within the scope of the final standard had the same average sales and profits as other establishments in their industries. This assumption is reasonable because there is no evidence suggesting that the financial characteristics of those firms whose employees experience MSD incidents are different from firms that do not have such incidents among their workforce. Absent such evidence, OSHA relied on the best available financial data (those from the Bureau of the Census (Ex. 28-6) and Robert Morris Associates (Ex. 502-69)), used commonly accepted methodology to calculate industry averages, and based its analysis of the significance of the projected economic impacts and the feasibility of compliance on these data. For this Final Economic Analysis, OSHA averaged profit data for the four years 1995 to 1998 rather than using a single year's data. Because industry profit can show major year-to-year variance, this modification assures that

<sup>2</sup> OSHA estimated productivity impacts by determining the average percentage reduction from gross costs caused by productivity in a set of examples of ergonomic interventions. Please see the Final Economic Analysis, particularly Tables V-17 through V-19, for details.

the results of the analysis will not depend on a single unusually bad or good year for an industry,

The analysis of the potential impacts of the ergonomics program standard on before-tax profits and sales shown in Table VIII-3 is called a screening analysis because it simply measures costs as a percentage of pre-tax profits and sales under the worst-case assumptions discussed above, but does not predict impacts on these before-tax profits or sales. The screening analysis is used to determine whether the compliance costs potentially associated with the final standard could lead to significant impacts on all establishments. The actual impact of the final standard on the profit and sales of

establishments in a given industry will depend on the price elasticity of demand for the products or services of establishments in that industry.

Table VIII-3 shows that the potential impacts of the final standard on average industry profits are small, even under the worst-case scenario of no cost passthrough. For all industries as a whole, annualized compliance costs are 0.5 percent of profits. Compliance costs do not exceed 5 percent of profits in any industry.

Based on the data for establishments in all industries shown in Table VIII-3, OSHA concludes that the ergonomics program standard is economically feasible for the establishments covered by the standard. OSHA reaches this

conclusion based on the fact that, even under the worst case scenario of full cost passthrough, impacts on average industry revenues are only 0.02 percent and under the worst case scenario of no cost passthrough, impacts on average profits are only 0.5 percent, with no industry having impacts on profit of greater than 5 percent.

OSHA's Final Economic Analysis also examined impacts for those establishments most likely to be affected by the standard as a result of having MSD hazards, and found the standard was feasible for these establishments as well. (See Chapter VI of the Final Economic Analysis)

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**Table VIII-3 Screening Analysis of the Potential Impacts of the Ergonomics Program Standard on All Industries Under Worst-Case Assumptions**

		For All Establishments						
		Annualized Compliance Costs for all Establishments	Revenues for all Establishments (\$1,000s)	Profits as a Percentage of Revenues	Profits (\$1,000s)	Annualized Compliance Costs as a Percentage of Revenues	Annualized Compliance Costs as a Percentage of Profits	Annualized Compliance Cost per Establishment
SIC	Industry							
074	Veterinary services	\$6,626,074	\$7,693,839	6.1%	\$472,228	0.09%	1.4%	\$291
075	Animal serv., except vet.	\$1,406,462	\$1,821,371	6.0%	\$109,619	0.08%	1.3%	\$136
078	Landscape & hort. services	\$26,019,201	\$19,389,342	5.9%	\$1,136,422	0.13%	2.3%	\$382
081	Timber tracts	\$524,389	\$851,843	10.3%	\$87,740	0.06%	0.6%	\$608
083	Forest products	\$151,696	\$247,111	10.3%	\$25,452	0.06%	0.6%	\$1,111
085	Forestry services	\$716,085	\$1,069,094	10.3%	\$110,117	0.07%	0.7%	\$457
091	Commercial fishing	\$631,759	\$1,343,245	5.7%	\$77,142	0.05%	0.8%	\$324
092	Fish hatcheries	\$93,972	\$62,473	6.1%	\$3,833	0.15%	2.5%	\$985
097	Hunting & trapping	\$109,451	\$167,605	6.1%	\$10,282	0.07%	1.1%	\$323
131	Crude petrol. & nat. gas	\$4,247,294	\$59,652,592	8.7%	\$5,159,949	0.01%	0.1%	\$547
132	Natural gas liquids	\$206,046	\$41,021,720	8.7%	\$3,548,379	0.00%	0.0%	\$368
138	Oil & gas field services	\$8,821,401	\$9,630,581	8.7%	\$833,045	0.09%	1.1%	\$1,007
201	Meat products	\$16,336,248	\$117,204,932	2.6%	\$2,992,729	0.01%	0.5%	\$5,304
202	Dairy products	\$7,181,176	\$59,676,113	3.4%	\$2,051,157	0.01%	0.4%	\$3,818
203	Preservd fruits & vegetables	\$5,714,289	\$47,486,808	4.0%	\$1,893,073	0.01%	0.3%	\$2,834
204	Grain mill products	\$6,256,889	\$55,960,493	3.3%	\$1,847,864	0.01%	0.3%	\$2,404
205	Bakery products	\$11,227,192	\$31,963,430	3.7%	\$1,173,991	0.04%	1.0%	\$3,187
206	Sugar and confection. prods	\$4,355,561	\$22,593,884	3.6%	\$821,090	0.02%	0.5%	\$3,967
207	Fats and oils	\$1,295,550	\$21,732,140	3.5%	\$752,684	0.01%	0.2%	\$2,555
208	Beverages	\$9,153,043	\$64,480,420	4.7%	\$3,055,948	0.01%	0.3%	\$4,004
209	Misc. food products	\$8,811,830	\$37,957,910	3.1%	\$1,188,055	0.02%	0.7%	\$2,199
211	Cigarettes	\$911,979	\$25,695,548	4.0%	\$1,032,237	0.00%	0.1%	\$60,799
212	Cigars	\$110,012	\$315,743	4.0%	\$12,684	0.03%	0.9%	\$2,341
213	Chewing & smoking tobacco	\$141,473	\$1,544,972	4.0%	\$62,064	0.01%	0.2%	\$5,441
214	Tobacco stemm. & redrying	\$260,642	\$3,104,375	4.0%	\$124,708	0.01%	0.2%	\$8,145
221	Brdwven fab. mills, cotton	\$1,729,877	\$6,018,357	4.0%	\$237,725	0.03%	0.7%	\$4,199
222	Broadwoven fabric mills	\$2,772,508	\$9,703,013	2.8%	\$268,592	0.03%	1.0%	\$6,054
223	Brdwvn fab. mills, wool	\$423,249	\$1,720,695	2.8%	\$47,631	0.02%	0.9%	\$4,275
224	Narrow fabric mills	\$793,599	\$1,485,068	3.2%	\$47,151	0.05%	1.7%	\$2,865
225	Knitting mills	\$6,557,074	\$17,214,105	2.9%	\$494,169	0.04%	1.3%	\$3,371
226	Tex. finishing, except wool	\$2,078,849	\$7,498,188	2.8%	\$210,230	0.03%	1.0%	\$2,440
227	Carpets and rugs	\$1,845,579	\$12,446,310	2.8%	\$345,385	0.01%	0.5%	\$3,813
228	Yarn and thread mills	\$2,939,788	\$12,173,797	2.0%	\$239,351	0.02%	1.2%	\$5,000
229	Misc. textile goods	\$2,411,461	\$8,817,910	2.8%	\$248,393	0.03%	1.0%	\$2,388
231	Men's & boys' suits & coats	\$818,300	\$1,906,167	0.9%	\$17,632	0.04%	4.6%	\$2,793
232	Men's & boys' furnishings	\$6,959,053	\$15,125,809	2.7%	\$410,792	0.05%	1.7%	\$3,295
233	Wm's & misses' outerwear	\$6,423,694	\$19,500,842	2.6%	\$503,021	0.03%	1.3%	\$717
234	Wm's & childrn's undergarmnts	\$1,050,167	\$2,918,268	2.4%	\$70,461	0.04%	1.5%	\$2,823
235	Hats, caps, & millinery	\$576,448	\$1,098,786	3.9%	\$43,127	0.05%	1.3%	\$1,513
236	Girls' & childrn's outerwear	\$815,446	\$2,258,886	2.0%	\$44,601	0.04%	1.8%	\$1,394
237	Fur goods	\$26,422	\$142,828	2.6%	\$3,654	0.02%	0.7%	\$199
238	Misc. apparel & accessories	\$998,257	\$2,244,834	2.6%	\$57,685	0.04%	1.7%	\$1,070
239	Misc. fab. textile prods	\$7,526,231	\$22,070,600	2.6%	\$576,033	0.03%	1.3%	\$856
241	Logging	\$2,375,425	\$15,538,413	3.9%	\$605,840	0.02%	0.4%	\$166
242	Sawmills & planing mills	\$8,394,106	\$25,776,399	4.3%	\$1,107,058	0.03%	0.8%	\$1,375
243	Millwork & plywood	\$15,367,887	\$31,414,582	3.6%	\$1,131,630	0.05%	1.4%	\$1,610
244	Wood containers	\$2,187,909	\$4,006,433	3.7%	\$146,701	0.05%	1.5%	\$773
245	Wood bldings & mobile homes	\$5,387,771	\$12,663,722	3.8%	\$475,846	0.04%	1.1%	\$5,161
249	Misc. wood products	\$4,587,760	\$13,133,205	3.9%	\$508,993	0.03%	0.9%	\$1,297
251	Household furniture	\$13,563,894	\$24,242,412	3.2%	\$775,683	0.06%	1.7%	\$2,466
252	Office furniture	\$3,869,704	\$9,836,788	3.8%	\$377,227	0.04%	1.0%	\$3,746
253	Pub blding & related furn.	\$2,961,832	\$6,139,247	4.1%	\$250,174	0.05%	1.2%	\$6,597
254	Partitions and fixtures	\$4,771,304	\$8,109,037	3.7%	\$301,202	0.06%	1.6%	\$1,593
259	Misc furniture and fixtures	\$2,079,483	\$4,857,016	3.2%	\$153,079	0.04%	1.4%	\$1,473
261	Pulp mills	\$657,339	\$5,810,924	4.5%	\$261,545	0.01%	0.3%	\$10,602
262	Paper mills	\$7,693,243	\$35,582,333	4.8%	\$1,690,161	0.02%	0.5%	\$22,364
263	Paperboard mills	\$2,674,347	\$19,899,897	4.5%	\$895,679	0.01%	0.3%	\$11,730
265	Paperbrd containers & boxes	\$11,927,157	\$40,019,006	4.6%	\$1,829,035	0.03%	0.7%	\$4,246
267	Misc. cnvrt'd paper products	\$13,220,823	\$49,954,537	4.3%	\$2,150,381	0.03%	0.6%	\$4,359
271	Newspapers	\$18,766,157	\$37,006,756	3.8%	\$1,406,082	0.05%	1.3%	\$2,114
272	Periodicals	\$3,995,497	\$26,525,283	3.8%	\$1,007,961	0.02%	0.4%	\$691
273	Books	\$5,832,617	\$26,774,751	4.5%	\$1,199,979	0.02%	0.5%	\$1,639
274	Miscellaneous publishing	\$2,255,167	\$10,624,468	4.5%	\$475,445	0.02%	0.5%	\$692
275	Commercial printing	\$27,882,271	\$66,006,851	3.4%	\$2,272,949	0.04%	1.2%	\$810
276	Manifold business forms	\$2,482,368	\$7,941,418	3.4%	\$266,038	0.03%	0.9%	\$2,725
277	Greeting cards	\$1,272,733	\$4,434,535	3.8%	\$168,491	0.03%	0.8%	\$8,900
278	Blankbooks & bookbinding	\$3,314,599	\$5,222,155	3.9%	\$205,657	0.06%	1.6%	\$2,094
279	Printing trade services	\$2,018,486	\$4,984,730	3.6%	\$178,485	0.04%	1.1%	\$587
281	Indust. inorganic chemicals	\$3,508,720	\$30,002,480	4.5%	\$1,348,616	0.01%	0.3%	\$2,524
282	Plastics mat. & synthetics	\$4,388,299	\$57,333,971	4.5%	\$2,577,543	0.01%	0.2%	\$5,009
283	Drugs	\$8,245,601	\$98,347,315	4.8%	\$4,707,405	0.01%	0.2%	\$5,037
284	Soap, clnrs, & toilet goods	\$4,973,167	\$48,294,820	4.4%	\$2,125,571	0.01%	0.2%	\$2,043
285	Paints & allied products	\$2,085,227	\$17,587,225	3.8%	\$659,521	0.01%	0.3%	\$1,410
286	Indust. organic chemicals	\$4,966,241	\$79,254,515	4.5%	\$3,556,542	0.01%	0.1%	\$5,250
287	Agricultural chemicals	\$1,506,510	\$22,569,700	3.8%	\$851,285	0.01%	0.2%	\$1,606
289	Misc. chemical products	\$3,754,194	\$27,864,576	4.8%	\$1,325,428	0.01%	0.3%	\$1,463
291	Petroleum refining	\$3,824,084	\$145,808,878	2.9%	\$4,155,553	0.00%	0.1%	\$13,906
295	Asphalt paving & roofing mat.	\$1,742,001	\$9,765,070	3.9%	\$382,554	0.02%	0.5%	\$1,273

**Table VIII-3 Screening Analysis of the Potential Impacts of the Ergonomics Program Standard on All Industries Under Worst-Case Assumptions**

		For All Establishments						
		Annualized Compliance Costs for all Establishments	Revenues for all Establishments (\$1,000s)	Profits as a Percentage of Revenues	Profits (\$1,000s)	Annualized Compliance Costs as a Percentage of Revenues	Annualized Compliance Costs as a Percentage of Profits	Annualized Compliance Cost per Establishment
SIC	Industry							
299	Misc. pet. & coal prods	\$595,662	\$6,900,468	4.7%	\$326,979	0.01%	0.2%	\$1,278
301	Tires and inner tubes	\$3,700,877	\$12,649,425	4.0% [d]	\$509,114	0.03%	0.7%	\$21,643
302	Rubber & plastics footwear	\$321,216	\$688,879	4.0% [d]	\$27,726	0.05%	1.2%	\$5,266
305	Hose, bltng, and gaskets	\$2,925,345	\$8,004,186	4.0%	\$319,914	0.04%	0.9%	\$3,542
306	Fab. rubber prod., n.e.c.	\$5,477,509	\$13,765,033	4.0%	\$554,015	0.04%	1.0%	\$3,100
308	Misc plastics, n.e.c.	\$32,524,105	\$106,907,067	4.0%	\$4,305,065	0.03%	0.8%	\$2,383
311	Leather tan. & finishing	\$883,110	\$2,738,038	1.7%	\$47,231	0.03%	1.9%	\$2,575
313	Footwear cut stock	\$100,992	\$213,944	2.2% [d]	\$4,700	0.05%	2.1%	\$1,443
314	Footwear, except rubber	\$2,001,936	\$3,634,490	2.3%	\$85,181	0.06%	2.4%	\$5,296
315	Leather gloves & mittens	\$133,700	\$149,789	2.2% [d]	\$3,290	0.09%	4.1%	\$1,938
316	Luggage	\$356,297	\$1,007,874	2.9%	\$29,480	0.04%	1.2%	\$1,365
317	Hndbags & prsnal leathr gds.	\$401,849	\$848,276	2.2% [d]	\$18,635	0.05%	2.2%	\$1,172
319	Leather goods, n.e.c.	\$440,533	\$651,426	2.2% [f]	\$14,310	0.07%	3.1%	\$1,054
321	Flat glass	\$979,004	\$2,709,081	4.9% [d]	\$133,468	0.04%	0.7%	\$12,086
322	Glass, pressed or blown	\$4,176,490	\$9,244,687	4.9% [f]	\$455,456	0.05%	0.9%	\$7,091
323	Prod. of purchased glass	\$3,651,089	\$9,109,494	5.1%	\$460,029	0.04%	0.8%	\$2,226
324	Cement, hydraulic	\$903,547	\$4,720,190	4.9% [d]	\$232,549	0.02%	0.4%	\$3,911
325	Structural clay products	\$1,805,854	\$3,232,723	5.4%	\$174,042	0.06%	1.0%	\$3,045
326	Pottery & related prods	\$2,456,424	\$3,370,197	4.9% [d]	\$166,039	0.07%	1.5%	\$2,047
327	Concrete & plast. prdcts	\$11,006,283	\$29,948,845	4.8%	\$1,446,026	0.04%	0.8%	\$1,159
328	Cut stone & stone prods	\$848,181	\$1,218,989	5.0%	\$61,254	0.07%	1.4%	\$792
329	Misc. nonmet. mineral prods.	\$3,786,458	\$12,831,147	5.0% [e]	\$635,442	0.03%	0.6%	\$2,368
331	Basic steel products	\$12,391,187	\$69,010,676	4.3%	\$2,971,554	0.02%	0.4%	\$9,650
332	Iron and steel foundries	\$7,727,050	\$15,484,686	4.6%	\$705,495	0.05%	1.1%	\$6,661
333	Primary nonfer. metals	\$1,718,779	\$17,465,720	4.5% [d]	\$789,048	0.01%	0.2%	\$8,551
334	Secondary nonfer. metals	\$838,630	\$7,521,366	3.9%	\$291,453	0.01%	0.3%	\$2,805
335	Nonfer. rolling & drawing	\$8,018,138	\$45,476,554	4.9%	\$2,211,228	0.02%	0.4%	\$7,256
336	Nonfer. foundries (cstngs)	\$4,713,869	\$9,611,068	4.5%	\$432,061	0.05%	1.1%	\$2,836
339	Misc. primary metal prdcts	\$1,331,479	\$4,169,927	4.8%	\$201,967	0.03%	0.7%	\$1,406
341	Met. cans & ship. containers	\$1,885,553	\$13,004,892	4.1%	\$527,097	0.01%	0.4%	\$4,335
342	Cutlery, hndtls, & hardware	\$6,825,191	\$17,122,208	4.6% [e]	\$789,478	0.04%	0.9%	\$2,790
343	Plumbing & heating fixtures	\$2,996,991	\$7,375,857	4.8%	\$351,921	0.04%	0.9%	\$4,356
344	Fab. struct. metal prdcts	\$22,004,754	\$56,840,749	4.3%	\$2,434,529	0.04%	0.9%	\$1,650
345	Screw machine products	\$5,146,027	\$11,596,795	4.4%	\$512,803	0.04%	1.0%	\$1,978
346	Met. forgings & stampings	\$15,669,434	\$40,752,728	4.6%	\$1,860,834	0.04%	0.8%	\$4,242
347	Metal services, n.e.c.	\$5,827,182	\$12,900,758	5.0%	\$638,665	0.05%	0.9%	\$1,054
348	Ordnance and access., n.e.c.	\$1,814,240	\$4,686,212	4.5% [d]	\$213,041	0.04%	0.9%	\$4,142
349	Misc. fab. metal products	\$14,624,727	\$38,754,246	4.9%	\$1,896,544	0.04%	0.8%	\$2,013
351	Engines and turbines	\$4,114,400	\$16,985,636	4.0% [d]	\$687,199	0.02%	0.6%	\$11,090
352	Farm & garden machinery	\$5,547,056	\$17,677,144	4.7%	\$835,521	0.03%	0.7%	\$3,150
353	Construct. & related mach.	\$10,256,663	\$33,857,157	4.3%	\$1,464,223	0.03%	0.7%	\$3,086
354	Metalworking machinery	\$14,909,924	\$34,863,234	4.6%	\$1,600,454	0.04%	0.9%	\$1,262
355	Special industry mach.	\$8,962,105	\$29,950,693	4.1%	\$1,215,684	0.03%	0.7%	\$1,871
356	General indust. mach.	\$12,635,827	\$38,890,135	4.3%	\$1,688,021	0.03%	0.7%	\$2,886
357	Computer & office equip.	\$8,888,477	\$72,679,343	3.3%	\$2,392,918	0.01%	0.4%	\$4,209
358	Refrig. & serv. indust. mach.	\$10,731,185	\$36,688,548	3.6%	\$1,318,603	0.03%	0.8%	\$4,778
359	Industrial mach., n.e.c.	\$17,581,643	\$35,100,649	5.1% [e]	\$1,775,325	0.05%	1.0%	\$679
361	Elect. dist. equipment	\$2,490,937	\$11,273,986	5.2%	\$583,158	0.02%	0.4%	\$2,847
362	Elect. indust. apparatus	\$6,362,629	\$21,854,697	5.1%	\$1,123,278	0.03%	0.6%	\$2,815
363	Household appliances	\$4,847,685	\$21,300,973	5.6% [d]	\$1,191,009	0.02%	0.4%	\$10,227
364	Elct. lghtng & wire equip.	\$6,061,735	\$23,289,566	5.7%	\$1,334,823	0.03%	0.5%	\$2,863
365	Household audio & vid. equip.	\$1,817,780	\$13,716,113	5.0%	\$689,969	0.01%	0.3%	\$2,230
366	Communications equipment	\$7,548,252	\$57,675,808	5.8% [e]	\$3,319,137	0.01%	0.2%	\$3,577
367	Electrnic compnnts & access.	\$16,948,945	\$103,870,202	5.6%	\$5,795,165	0.02%	0.3%	\$2,580
369	Misc. elect. equipment	\$6,129,975	\$26,674,704	5.9% [e]	\$1,571,284	0.02%	0.4%	\$3,428
371	Motor vehicles & equip.	\$47,559,830	\$339,576,992	3.5%	\$11,890,177	0.01%	0.4%	\$9,420
372	Aircraft and parts	\$16,172,006	\$93,016,989	4.7% [e]	\$4,339,753	0.02%	0.4%	\$9,552
[a] 373	Ship, boat bldng and repair	\$4,325,288	\$6,028,640	3.6%	\$219,574	0.07%	2.0%	\$1,616
374	Railroad equipment	\$1,401,806	\$6,654,526	3.7%	\$244,554	0.02%	0.6%	\$6,581
375	Motorcycles & bicycles	\$728,294	\$3,336,172	3.7%	\$124,877	0.02%	0.6%	\$1,968
376	Guided missiles	\$2,376,442	\$18,052,173	3.7%	\$675,714	0.01%	0.4%	\$22,633
379	Misc. transportation equip.	\$1,927,471	\$8,420,402	3.7% [e]	\$307,940	0.02%	0.6%	\$1,698
381	Srch & navigation equipment	\$5,330,824	\$30,132,161	4.7% [e]	\$1,416,212	0.02%	0.4%	\$7,659
382	Meas. & contrllng devices	\$9,112,747	\$39,725,944	5.6%	\$2,230,765	0.02%	0.4%	\$1,916
384	Medical instrmnts & supplies	\$8,892,440	\$49,607,297	5.3% [e]	\$2,635,490	0.02%	0.3%	\$1,989
385	Ophthalmic goods	\$882,740	\$2,850,267	3.7%	\$104,747	0.03%	0.8%	\$1,504
386	Photo. equip. & supplies	\$2,432,719	\$19,103,716	4.0%	\$764,149	0.01%	0.3%	\$3,374
387	Watches, clocks, & parts	\$160,640	\$768,223	5.1% [d]	\$38,879	0.02%	0.4%	\$1,139
391	Jwlry, slvrwre, and plate	\$1,545,211	\$6,261,321	3.3%	\$208,466	0.02%	0.7%	\$549
393	Musical instruments	\$603,803	\$1,313,948	3.8% [d]	\$49,986	0.05%	1.2%	\$1,098
394	Toys and sporting goods	\$4,651,691	\$14,422,948	3.7%	\$527,830	0.03%	0.9%	\$1,323
395	Office and art supplies	\$998,400	\$3,683,197	3.8% [d]	\$140,117	0.03%	0.7%	\$962
396	Costume jewelry & notions	\$672,112	\$2,246,891	3.8% [d]	\$85,477	0.03%	0.8%	\$615
399	Misc. manufactures	\$6,687,609	\$19,008,990	4.1%	\$773,665	0.04%	0.9%	\$760
411	Local & suburban trans.	\$18,525,193	\$8,742,145	4.4%	\$384,558	0.21%	4.8%	\$1,943
412	Taxis	\$1,632,576	\$1,286,889	4.5% [d]	\$58,011	0.13%	2.8%	\$494
413	Intercity & rural bus trans.	\$2,001,297	\$1,610,701	5.4%	\$86,575	0.12%	2.3%	\$4,161
414	Bus charter service	\$1,485,827	\$1,653,193	4.6%	\$75,976	0.09%	2.0%	\$1,038

**Table VIII-3 Screening Analysis of the Potential Impacts of the Ergonomics Program Standard on All Industries Under Worst-Case Assumptions**

SIC	Industry	Annualized Compliance Costs for all Establishments	Revenues for all Establishments (\$1,000s)	Profits as a Percentage of Revenues	Profits (\$1,000s)	For All Establishments Annualized Compliance Costs as a Percentage of Revenues	Annualized Compliance Costs as a Percentage of Profits	Annualized Compliance Cost per Establishment
415	School buses	\$7,856,261	\$4,192,484	4.6%	\$190,758	0.19%	4.1%	\$1,849
417	Bus terminals	\$40,656	\$44,464	4.5% [d]	\$2,004	0.09%	2.0%	\$713
421	Trking & Courier Service	\$163,308,208	\$169,408,687	3.4%	\$5,825,289	0.10%	2.8%	\$1,397
422	Pub. warehousing & storage	\$12,659,274	\$11,696,021	10.7%	\$1,246,682	0.11%	1.0%	\$1,068
423	Trucking terminal fac.	\$93,603	na *	3.9% [d]	na	na	na	\$1,170
430	U.S. Postal Service	\$59,215,160	\$56,600,000	na	na	0.10%	na	\$1,777
451	Air trans., scheduled	\$78,440,368	\$139,896,879	3.6% x	\$4,977,185	0.06%	1.6%	\$11,871
452	Air trans., nonsched.	\$1,608,760	\$4,596,451	5.3%	\$243,612	0.04%	0.7%	\$879
458	Airports and services	\$8,187,010	\$9,429,735	3.8%	\$360,687	0.09%	2.3%	\$2,040
461	Pipelines, except natural gas	\$1,573,705	\$8,949,097	6.5% [d]	\$585,965	0.02%	0.3%	\$1,634
472	Pass. trans. arrangements	\$4,712,700	\$14,855,776	2.4%	\$360,683	0.03%	1.3%	\$142
473	Freight trans. arrangements	\$9,070,991	\$13,557,555	3.9%	\$521,966	0.07%	1.7%	\$614
474	Rental of railroad cars	\$99,116	\$2,475,148	3.4% [d]	\$83,933	0.00%	0.1%	\$854
478	Misc. trans. services	\$3,543,768	\$3,112,064	5.4%	\$168,489	0.11%	2.1%	\$1,322
481	Telephone communication	\$25,297,052	\$208,432,617	5.9%	\$12,368,636	0.01%	0.2%	\$927
482	Telegrph & other comm.	\$125,668	\$1,436,935	5.6% [f]	\$80,168	0.01%	0.2%	\$270
483	Radio & TV broadcasting	\$2,992,791	\$35,250,634	6.6%	\$2,327,550	0.01%	0.1%	\$339
484	Cable & othr pay TV services	\$4,980,102	\$43,809,951	2.7%	\$1,193,821	0.01%	0.4%	\$1,041
489	Communication serv., n.e.c.	\$311,015	\$5,631,490	6.1%	\$343,521	0.01%	0.1%	\$209
491	Electric services	\$12,634,563	\$162,448,596	12.5%	\$20,251,925	0.01%	0.1%	\$2,013
492	Gas product. & distribution	\$5,105,696	\$89,523,533	7.9%	\$7,055,407	0.01%	0.1%	\$1,296
493	Comb. utility services	\$5,571,120	\$71,542,818	10.4% [d]	\$7,422,386	0.01%	0.1%	\$2,978
494	Water supply	\$1,063,552	\$4,130,669	12.2%	\$504,974	0.03%	0.2%	\$287
495	Sanitary services	\$7,251,426	\$24,057,028	6.2%	\$1,503,468	0.03%	0.5%	\$1,117
496	Steam & air-cond. supplies	\$35,821	\$434,948	10.4% [d]	\$45,125	0.01%	0.1%	\$519
497	Irrigation systems	\$54,670	\$167,025	10.4% [d]	\$17,328	0.03%	0.3%	\$149
501	Motor vehicles	\$32,754,703	\$510,238,863	2.2%	\$11,173,893	0.01%	0.3%	\$715
502	Furn. & homefurnishings	\$11,501,256	\$68,862,490	2.3%	\$1,572,923	0.02%	0.7%	\$689
503	Lumber & construct. mat.	\$22,645,424	\$117,970,381	2.3%	\$2,715,347	0.02%	0.8%	\$956
504	Prof. & commercial equip.	\$40,224,535	\$329,207,483	2.7%	\$8,987,745	0.01%	0.4%	\$774
505	Met. & minerals, except pet.	\$11,399,553	\$151,787,907	2.6%	\$3,921,078	0.01%	0.3%	\$999
506	Electrical goods	\$26,119,207	\$337,183,776	2.5%	\$8,455,255	0.01%	0.3%	\$626
507	Hardware supplies	\$20,028,215	\$95,859,741	2.5%	\$2,410,903	0.02%	0.8%	\$767
508	Mach., equip., & supplies	\$50,767,296	\$293,593,950	2.9%	\$8,469,609	0.02%	0.6%	\$666
509	Misc. durable goods	\$20,696,753	\$183,194,901	3.0% [e]	\$5,446,333	0.01%	0.4%	\$517
511	Paper and paper products	\$15,282,832	\$132,104,428	1.9%	\$2,551,991	0.01%	0.6%	\$817
512	Drugs, propriet., & sundries	\$10,582,855	\$194,538,527	3.6% [e]	\$6,954,752	0.01%	0.2%	\$1,447
513	Apparel and notions	\$11,134,655	\$125,178,134	2.5%	\$3,102,437	0.01%	0.4%	\$512
514	Groceries & related products	\$66,340,179	\$587,575,642	1.8%	\$10,387,601	0.01%	0.6%	\$1,532
515	Farm-prod. raw materials	\$3,041,440	\$141,454,588	28.3%	\$40,069,484	0.00%	0.0%	\$285
516	Chemicals & allied prods	\$9,494,525	\$170,707,220	3.1%	\$5,263,714	0.01%	0.2%	\$626
517	Petrol. & petrol. prods	\$8,487,200	\$315,300,716	1.3%	\$4,022,765	0.00%	0.2%	\$644
518	Beer, wine, & dist. bev.	\$13,663,221	\$70,906,318	3.5%	\$2,493,147	0.02%	0.5%	\$2,703
519	Misc. nondurable goods	\$28,870,656	\$218,636,094	2.3%	\$5,051,977	0.01%	0.6%	\$531
521	Lumber & other blding mat.	\$34,967,693	\$94,882,400	2.3%	\$2,182,295	0.04%	1.6%	\$1,441
523	Paint, glass, wallpaper str	\$3,297,530	\$7,137,672	2.3%	\$160,598	0.05%	2.1%	\$337
525	Hardware stores	\$5,989,715	\$11,768,982	2.2%	\$253,033	0.05%	2.4%	\$419
526	Retail nurseries and gardens	\$5,248,128	\$8,246,165	2.5% [e]	\$202,031	0.06%	2.6%	\$466
527	Mobile home dealers	\$3,490,941	\$12,128,180	3.2%	\$391,134	0.03%	0.9%	\$730
531	Department stores	\$89,098,598	\$212,202,049	2.8%	\$5,941,657	0.04%	1.5%	\$8,232
533	Variety stores	\$6,476,122	\$7,801,344	3.1%	\$241,842	0.08%	2.7%	\$597
539	Misc. gen. merchandise str.	\$12,152,733	\$73,078,703	2.2%	\$1,607,731	0.02%	0.8%	\$821
541	Grocery stores	\$134,778,259	\$413,038,161	1.4%	\$5,576,015	0.03%	2.4%	\$1,044
542	Meat and fish markets	\$2,349,305	\$5,620,494	2.5%	\$140,512	0.04%	1.7%	\$299
543	Fruit & vegetable markets	\$672,801	\$2,467,380	1.4% [d]	\$34,809	0.03%	1.9%	\$201
544	Candy, nut, & confctnry str	\$874,089	\$1,508,092	4.1%	\$61,455	0.06%	1.4%	\$184
545	Dairy products stores	\$408,085	\$746,400	1.4% [d]	\$10,530	0.05%	3.9%	\$160
546	Retail bakeries	\$5,047,340	\$5,837,642	3.2%	\$186,805	0.09%	2.7%	\$250
549	Misc. food stores	\$1,727,223	\$4,903,987	2.4%	\$116,470	0.04%	1.5%	\$174
551	New and used car dealers	\$60,977,634	\$473,713,203	1.2% [e]	\$5,802,987	0.01%	1.1%	\$2,475
552	Used car dealers	\$1,891,804	\$26,046,018	2.5%	\$638,127	0.01%	0.3%	\$86
553	Auto & home supply stores	\$20,999,213	\$41,415,750	2.3%	\$942,208	0.05%	2.2%	\$479
554	Gas service stations	\$24,394,488	\$154,592,503	1.6%	\$2,473,480	0.02%	1.0%	\$253
555	Boat dealers	\$2,291,931	\$7,697,095	2.0%	\$150,093	0.03%	1.5%	\$452
556	Rec. vehicle dealers	\$2,217,094	\$9,355,689	2.1%	\$191,792	0.02%	1.2%	\$740
557	Motorcycle dealers	\$464,370	\$6,487,093	2.8%	\$181,639	0.01%	0.3%	\$123
559	Auto dealers, n.e.c.	\$126,679	\$1,290,175	2.6% [e]	\$33,545	0.01%	0.4%	\$103
561	Men's & boys' clothing str	\$2,136,535	\$9,985,692	1.4%	\$137,303	0.02%	1.6%	\$154
562	Women's clothing stores	\$6,192,802	\$29,323,315	1.1%	\$322,556	0.02%	1.9%	\$153
563	Wm's access. & specialty str	\$1,027,638	\$4,417,649	1.8% [d]	\$81,580	0.02%	1.3%	\$119
564	Chldrn's & infants' wear str	\$1,153,818	\$4,249,583	1.8% [d]	\$78,477	0.03%	1.5%	\$222
565	Family clothing stores	\$14,203,805	\$40,135,206	2.2%	\$862,907	0.04%	1.6%	\$725
566	Shoe stores	\$5,537,339	\$18,686,566	2.4%	\$453,149	0.03%	1.2%	\$174
569	Misc. apparel stores	\$935,244	\$4,848,422	2.0%	\$96,968	0.02%	1.0%	\$92
571	Furnitre & homefurnishng str	\$32,655,674	\$63,978,206	2.4%	\$1,564,569	0.05%	2.1%	\$495
572	Household appliance str	\$5,085,868	\$10,491,658	2.2%	\$233,439	0.05%	2.2%	\$506
573	Radio, TV, & compr str	\$13,918,160	\$59,843,357	2.1%	\$1,268,471	0.02%	1.1%	\$356
581	Eating & drinking places	\$169,794,005	\$253,760,234	3.0%	\$7,608,776	0.07%	2.2%	\$364



**Table VIII-3 Screening Analysis of the Potential Impacts of the Ergonomics Program Standard on All Industries Under Worst-Case Assumptions**

SIC	Industry	Annualized Compliance Costs for all Establishments	Revenues for all Establishments (\$1,000s)	Profits as a Percentage of Revenues	Profits (\$1,000s)	For All Establishments		
						Annualized Compliance Costs as a Percentage of Revenues	Annualized Compliance Costs as a Percentage of Profits	Annualized Compliance Cost per Establishment
591	Drug stores	\$18,648,665	\$91,701,331	2.2%	\$1,994,504	0.02%	0.9%	\$431
592	Liquor stores	\$1,851,269	\$21,457,553	1.6%	\$337,956	0.01%	0.5%	\$64
593	Used merchandise stores	\$5,256,032	\$7,863,561	4.8%	\$379,417	0.07%	1.4%	\$223
594	Misc. shopping goods str.	\$32,314,677	\$86,940,718	2.6%	\$2,295,237	0.04%	1.4%	\$250
596	Nonstore retailers	\$25,407,770	\$71,726,499	2.5%	\$1,784,319	0.04%	1.4%	\$848
598	Fuel dealers	\$5,259,158	\$17,012,865	1.8%	\$312,317	0.03%	1.7%	\$465
599	Retail stores, n.e.c.	\$13,833,591	\$39,343,051	3.2%	\$1,268,653	0.04%	1.1%	\$145
601	Central res. depository	\$531,574	\$34,398,950	10.8% [d]	\$3,715,087	0.00%	0.0%	\$5,212
602	Commercial banks	\$25,779,253	\$362,240,850	10.8% [d]	\$39,122,012	0.01%	0.1%	\$382
603	Savings institutions	\$4,331,547	\$86,099,788	10.8% [d]	\$9,298,777	0.01%	0.0%	\$269
606	Credit unions	\$3,002,681	\$28,386,945	10.8% [d]	\$3,065,790	0.01%	0.1%	\$201
608	Foreign banking	\$355,986	\$85,523,610	10.8% [d]	\$9,236,550	0.00%	0.0%	\$543
609	Banking-related functions	\$1,528,544	\$17,268,075	10.8% [d]	\$1,864,952	0.01%	0.1%	\$263
611	Federal credit agencies	\$376,512	\$27,976,840	10.8%	\$3,021,499	0.00%	0.0%	\$282
614	Personal cred. institutions	\$2,942,012	\$69,321,834	15.5% [d]	\$10,721,777	0.00%	0.0%	\$155
615	Business cred. institutions	\$2,261,122	\$54,425,294	17.1% [d]	\$9,292,417	0.00%	0.0%	\$422
616	Mortgage bankers & brokers	\$4,635,274	\$28,664,554	11.7%	\$3,340,580	0.02%	0.1%	\$212
621	Security brokers & dealers	\$8,719,776	\$136,415,141	12.8%	\$17,415,666	0.01%	0.1%	\$342
622	Commodity contracts brokers	\$224,162	\$2,902,031	13.3%	\$386,418	0.01%	0.1%	\$138
623	Security & commod. exchanges	\$187,861	\$1,424,656	13.3%	\$189,699	0.01%	0.1%	\$1,606
628	Security & commod. services	\$3,311,965	\$30,330,543	15.3% [d]	\$4,647,281	0.01%	0.1%	\$183
631	Life insurance	\$12,355,467	\$402,471,102	6.8% [d]	\$27,462,003	0.00%	0.0%	\$1,051
632	Medical & health insur.	\$7,921,501	\$225,866,321	3.6%	\$8,146,743	0.00%	0.1%	\$2,374
633	Fire, marine, & casity ins.	\$15,981,462	\$304,968,860	9.1% [d]	\$27,599,682	0.01%	0.1%	\$785
635	Surety insurance	\$247,936	\$5,184,734	6.8%	\$353,772	0.00%	0.1%	\$428
636	Title insurance	\$1,019,228	\$5,360,463	4.6%	\$243,901	0.02%	0.4%	\$400
637	Pension and health funds	\$757,546	\$1,884,439	6.8% [f]	\$128,582	0.04%	0.6%	\$276
639	Ins. carriers, n.e.c.	\$97,321	\$810,377	6.8%	\$55,295	0.01%	0.2%	\$333
641	Insurance agents	\$16,685,126	\$67,001,357	6.8% [d]	\$4,572,843	0.02%	0.4%	\$131
651	Real estate operators	\$18,693,068	\$89,035,697	14.1% [d]	\$12,527,641	0.02%	0.1%	\$186
653	RE agents and managers	\$22,419,049	\$72,786,929	13.2%	\$9,626,071	0.03%	0.2%	\$180
654	Title abstract offices	\$725,371	\$2,702,283	13.3% [e]	\$359,659	0.03%	0.2%	\$140
655	Subdividers & developrs	\$4,539,996	\$17,073,624	10.6%	\$1,811,322	0.03%	0.3%	\$245
671	Holding offices	\$4,342,164	\$49,468,775	25.4%	\$12,557,559	0.01%	0.0%	\$453
672	Investment offices	\$608,512	\$12,829,710	20.4%	\$2,620,925	0.00%	0.0%	\$661
673	Trusts	\$1,558,865	\$12,102,680	24.3%	\$2,940,648	0.01%	0.1%	\$176
679	Miscellaneous investing	\$1,674,469	\$23,366,830	21.5%	\$5,033,629	0.01%	0.0%	\$199
701	Hotels and motels	\$61,674,948	\$85,827,743	7.0%	\$5,965,028	0.07%	1.0%	\$1,363
702	Rooming & boarding houses	\$139,743	\$427,076	7.0%	\$29,727	0.03%	0.5%	\$86
703	Camps and rec. vehicle parks	\$420,606	\$2,820,658	7.3%	\$206,909	0.01%	0.2%	\$57
704	Membership-basis org. hotels	\$202,861	\$762,685	7.0% [d]	\$53,087	0.03%	0.4%	\$84
721	Laundry & garment services	\$20,600,413	\$19,968,307	5.9%	\$1,184,345	0.10%	1.7%	\$363
722	Photo studios, portrait	\$2,049,535	\$4,360,841	4.5% [d]	\$196,238	0.05%	1.0%	\$156
723	Beauty shops	\$5,627,412	\$11,597,696	4.4%	\$510,299	0.05%	1.1%	\$69
724	Barber shops	\$654,847	\$488,787	5.9%	\$28,619	0.13%	2.3%	\$146
725	Shoe repair	\$300,268	\$280,028	5.9%	\$16,396	0.11%	1.8%	\$135
726	Fun. service and crematories	\$2,666,361	\$8,817,707	7.6% [d]	\$665,737	0.03%	0.4%	\$169
729	Misc personal services.	\$3,091,259	\$6,849,595	6.6% [d]	\$449,621	0.05%	0.7%	\$101
731	Advertising	\$7,680,146	\$28,132,776	3.9%	\$1,098,079	0.03%	0.7%	\$391
732	Credit report & collection	\$2,726,767	\$8,373,157	5.4%	\$454,864	0.03%	0.6%	\$394
733	Mailing, reprod, steno., serv	\$10,279,680	\$26,231,013	4.7%	\$1,237,656	0.04%	0.8%	\$293
734	Services to buildings	\$21,818,569	\$24,230,046	3.5%	\$853,530	0.09%	2.6%	\$333
735	Misc. equipt. rental	\$9,546,733	\$30,369,885	8.8%	\$2,686,091	0.03%	0.4%	\$385
736	Pers. supply services	\$82,469,891	\$71,832,848	3.3%	\$2,343,402	0.11%	3.5%	\$2,207
737	Compnr & data proc. services	\$38,985,907	\$181,997,360	4.9%	\$8,989,509	0.02%	0.4%	\$438
738	Misc. business services	\$33,639,921	\$71,061,254	5.1%	\$3,604,501	0.05%	0.9%	\$393
751	Auto rentals, no drivers	\$6,545,414	\$28,628,943	5.4%	\$1,559,917	0.02%	0.4%	\$615
752	Automobile parking	\$1,773,084	\$4,810,800	4.4%	\$211,333	0.04%	0.8%	\$199
753	Automotive repair shops	\$28,177,625	\$52,456,660	3.9%	\$2,024,838	0.05%	1.4%	\$202
754	Automotive serv., exc repair	\$10,203,088	\$9,160,104	4.4% [d]	\$406,480	0.11%	2.5%	\$379
762	Electrical repair shops	\$7,288,133	\$12,355,727	4.6%	\$572,812	0.06%	1.3%	\$377
763	Watch and jewelry repair	\$306,837	\$374,160	5.4%	\$20,339	0.08%	1.5%	\$170
764	Reupholstery & furn. repair	\$1,037,044	\$1,276,653	5.4%	\$69,396	0.08%	1.5%	\$152
769	Misc. repair shops	\$14,448,201	\$24,393,605	5.9% [d]	\$1,428,768	0.06%	1.0%	\$370
781	Motion picture production	\$14,989,448	\$28,310,206	4.7% [d]	\$1,333,418	0.05%	1.1%	\$1,021
782	Motion picture dist.	\$1,283,513	\$18,051,508	5.1%	\$927,457	0.01%	0.1%	\$882
783	Motion picture theaters	\$5,582,973	\$7,023,730	6.3%	\$439,512	0.08%	1.3%	\$850
784	Video tape rental	\$6,219,007	\$6,459,177	5.9% [d]	\$379,477	0.10%	1.6%	\$299
791	Dance studios & schools	\$446,492	\$863,722	4.3%	\$36,968	0.05%	1.2%	\$78
792	Prducers, orch., entertainers	\$5,581,198	\$16,444,890	4.6%	\$758,789	0.03%	0.7%	\$331
793	Bowling centers	\$1,824,594	\$2,944,692	3.8% [d]	\$110,426	0.06%	1.7%	\$318
794	Commercial sports	\$4,986,471	\$12,089,744	3.5%	\$417,096	0.04%	1.2%	\$1,047
799	Misc. recreation services	\$42,280,573	\$55,776,035	4.4%	\$2,480,533	0.08%	1.7%	\$684
801	Offices of medical doctors	\$71,151,405	\$186,598,097	6.4%	\$11,895,629	0.04%	0.6%	\$381
802	Dentists offices and clinics	\$22,130,890	\$46,131,244	10.5%	\$4,820,715	0.05%	0.5%	\$196
803	Osteopathic physicians	\$1,253,148	\$4,582,835	13.4% [e]	\$612,954	0.03%	0.2%	\$138
804	Other health practitioners	\$17,910,457	\$25,053,745	7.4%	\$1,848,469	0.07%	1.0%	\$212
805	Nursing & personal care fac.	\$95,189,760	\$63,625,522	4.7%	\$3,014,592	0.15%	3.2%	\$3,965

**Table VIII-3 Screening Analysis of the Potential Impacts of the Ergonomics Program Standard on All Industries Under Worst-Case Assumptions**

						For All Establishments		
		Annualized Compliance Costs for all Establishments	Revenues for all Establishments (\$1,000s)	Profits as a Percentage of Revenues	Profits (\$1,000s)	Annualized Compliance Costs as a Percentage of Revenues	Annualized Compliance Costs as a Percentage of Profits	Annualized Compliance Cost per Establishment
SIC	Industry							
806	Hospitals	\$264,170,417	\$343,314,509	5.5%	\$18,867,797	0.08%	1.4%	\$36,277
807	Med. & dental labs	\$8,668,894	\$16,543,625	7.2%	\$1,188,033	0.05%	0.7%	\$569
808	Home hlth care services	\$42,739,074	\$27,690,537	3.2%	\$879,175	0.15%	4.9%	\$2,654
809	Hlth & allied serv., n.e.c.	\$17,904,141	\$26,036,633	6.7%	\$1,745,383	0.07%	1.0%	\$859
811	Legal services	\$30,835,042	\$116,202,122	17.5%	\$20,335,371	0.03%	0.2%	\$183
821	Elem. & secondary schools	\$20,300,210	\$30,967,943	5.9% [e]	\$1,819,367	0.07%	1.1%	\$1,127
822	Colleges & universities	\$47,667,382	\$73,194,239	9.1%	\$6,688,549	0.07%	0.7%	\$13,013
823	Libraries	\$538,525	\$846,367	8.1%	\$68,908	0.06%	0.8%	\$239
824	Vocational schools	\$1,930,703	\$6,322,931	6.3%	\$399,121	0.03%	0.5%	\$283
829	Schools, n.e.c.	\$3,098,213	\$7,437,108	5.5% [d]	\$405,322	0.04%	0.8%	\$201
832	Individual & fam. services	\$24,059,183	\$25,266,265	4.5%	\$1,130,665	0.10%	2.1%	\$559
833	Job train. & related serv.	\$10,545,092	\$8,830,464	3.4%	\$300,236	0.12%	3.5%	\$1,157
835	Child day care services	\$12,397,073	\$12,459,047	4.7%	\$579,346	0.10%	2.1%	\$231
836	Residential care	\$26,267,710	\$20,174,955	3.4%	\$690,992	0.13%	3.8%	\$913
839	Social services, n.e.c.	\$6,954,902	\$22,170,593	5.3%	\$1,175,041	0.03%	0.6%	\$443
841	Museums & art galleries	\$2,088,113	\$3,660,267	21.5%	\$785,127	0.06%	0.3%	\$462
842	Bot. & zoolog. gardens	\$673,379	\$906,476	21.5%	\$194,439	0.07%	0.3%	\$1,151
861	Business associations	\$3,324,182	\$14,242,520	3.9%	\$560,206	0.02%	0.6%	\$211
862	Prof. organizations	\$1,562,948	\$7,845,620	4.9% [d]	\$384,435	0.02%	0.4%	\$222
863	Labor organizations	\$3,256,892	\$11,731,332	8.6%	\$1,008,895	0.03%	0.3%	\$167
864	Civic & social assoc.	\$11,815,935	\$15,241,892	4.3%	\$647,780	0.08%	1.8%	\$320
865	Political organizations	\$440,520	\$1,093,341	7.2%	\$78,846	0.04%	0.6%	\$171
866	Religious organizations	\$28,013,389	\$57,709,235	8.9%	\$5,121,695	0.05%	0.5%	\$177
869	Membership orgs., n.e.c.	\$4,202,676	\$8,262,479	8.5% [d]	\$702,311	0.05%	0.6%	\$463
871	Eng. and arch. services	\$32,230,001	\$98,926,133	4.6%	\$4,565,342	0.03%	0.7%	\$409
872	Accntng, auditng, & bkeeping	\$24,929,076	\$49,834,103	12.0%	\$5,955,175	0.05%	0.4%	\$296
873	Research & testing services	\$20,808,622	\$47,185,349	4.9%	\$2,321,878	0.04%	0.9%	\$1,069
874	Management & pub. relations	\$39,875,732	\$96,714,846	6.3%	\$6,051,135	0.04%	0.7%	\$420
899	Services, n.e.c.	\$5,945,705	\$13,388,980	6.8%	\$910,451	0.04%	0.7%	\$345
Subtotal		\$3,979,807,204	\$15,852,563,369		\$788,983,644			
Average (weighted)		\$40,446,172	\$110,726,844	5.6%	\$5,229,943	0.05%	1.1%	\$671
900	State and local governments	\$558,536,987	\$816,963,289	na	na	0.07%	na	\$5,943
Total		\$4,538,344,191	\$16,669,526,658		\$788,983,644			

Source: Office of Regulatory Analysis.

Revenue data are from U.S. Dept. of Commerce, Bureau of Census. Compliance costs are from Chapter V of this Final Economic Analysis. Profit data are derived from Robert Morris Associates, RMA Annual Statement Studies 1995-1998 (RMA) and U.S. Department of the Treasury, 1995-1997 (IRS). Average profit rates for the period 1995 through 1998 were calculated from a weighted average of profit rates over this period for all 4-digit industries associated with each 3-digit SIC classification. Revenues were used as weights in this calculation.

\*Total revenues from SIC 423 are suppressed by the Census Bureau.

[a] Excludes SIC 3731.

[b] Profit rates, except where noted, are derived from Robert Morris Associates "RMA Studies."

[c] Profit data not available for all 4-digit industries in this classification; profit rates interpolated from a combination of RMA and IRS profit data.

[d] Based on a combination of RMA and IRS profit data.

[e] Based on IRS profit data.

*G. Economic Impacts*

To identify possible economic impacts, OSHA compared annualized costs to revenues and profits for all covered establishments, for small entities defined as small using Small Business Administration (SBA) size criteria, and for all small entities with 1–19 employees (Ex. 28–3). Costs were annualized over ten years, including the costs of controlling all of the MSDs projected to occur in the facility over that time period.

OSHA analyzed the impacts of the final standard's annualized compliance costs on small entities in each 3-digit SIC industry. The results of this analysis are shown in Tables VIII–4 and VIII–5. OSHA's procedures call for the agency

to conduct a Final Regulatory Flexibility Analysis if, in any affected sector, the impact of the annualized compliance costs exceeds 1 percent of revenues or 5 percent of profits for a substantial number of small entities. As Table VIII–4 shows, in no 3-digit industry do the expected costs of compliance exceed 1 percent of revenues. However, the impact of the compliance costs exceeds 5 percent of profits for 1 industry, SIC 315, leather gloves and mittens.

Focusing on very small establishments, Table VIII–5 shows that no 3-digit industry has estimated costs that exceed one percent of average revenues. The table also shows that in no industry do impacts on profits exceed 5 percent.

However, OSHA analysis in Chapter VII of the Final Economic Analysis shows that some small entities and very small entities in the most affected class, those finding MSD hazards, would have compliance costs exceeding 5 percent of profits.

OSHA prepared an Initial Regulatory Flexibility Analysis as a follow up to convening a Small Business Regulatory Enforcement Fairness Act (SBREFA) Panel (the report of the Panel is in the docket of this rulemaking as Ex. 23). Based on the finding that in some industries the most affected small entities would have compliance costs exceeding 5 percent of profits, OSHA prepared a Final Regulatory Flexibility Analysis, a summary of which is presented in the next section.

**Table VIII-4 Estimated Economic Impact Under Worst-Case Scenarios, of the  
Ergonomics Program Standard on Firms Meeting SBA Size Criteria**

SIC	Industry	SBA size (Number of Employees)*	Annualized Compliance Costs for Establishments	Revenues for SBA Firms (\$1,000s)	Average Revenue per Firm (\$BA)	Profits as a Percentage of Revenues [c]	Profits for SBA Firms (\$1,000s)	Average Profit per Firm (\$BA)	Average Cost per Firm (\$BA)	For all small firms	
										Annualized Com- pliance Costs as a Percentage of Revenues-SBA (percent)	Annualized Com- pliance Costs as a Percentage of Profits-SBA (percent)
074	Veterinary services	100	\$6,497,378	\$7,309,664	\$323,809	6.1%	\$448,648	\$19,875	\$286	0.09%	1.4%
075	Animal serv., except vet.	100	\$909,475	\$1,345,447	\$130,385	6.0%	\$88	\$7,847	\$88	0.07%	1.1%
081	Landscaping & hort. services	500	\$13,575,734	\$15,120,877	\$224,169	5.9%	\$886,244	\$13,139	\$199	0.09%	1.5%
082	Timber tracts	100	\$162,811	\$402,898	\$655,119	10.3%	\$41,498	\$67,477	\$192	0.03%	0.3%
083	Forest products	1000	\$68,842	\$247,111	\$2,395,136	10.3%	\$25,452	\$247,111	\$690	0.03%	0.3%
085	Forestry services	500	\$439,295	\$742,159	\$651,017	10.3%	\$76,442	\$67,055	\$285	0.04%	0.4%
091	Commercial fishing	100	\$187,907	\$684,364	\$467,143	5.7%	\$39,303	\$26,828	\$97	0.02%	0.4%
092	Fish hatcheries	100	\$25,248	\$17,947	\$263,926	6.1%	\$1,101	\$16,191	\$294	0.11%	1.8%
097	Hunting & trapping	100	\$52,814	\$55,959	\$221,182	6.1%	\$3,433	\$13,569	\$160	0.07%	1.2%
131	Crude petrol. & nat. gas	500	\$2,225,613	\$27,927,970	\$3,965,915	8.7%	\$2,415,769	\$34,052	\$302	0.01%	0.1%
132	Natural gas liquids	500	\$145,718	\$2,888,360	\$48,139,333	8.7%	\$249,843	\$4,164,052	\$339	0.00%	0.0%
138	Oil & gas field services	500	\$3,052,903	\$4,998,908	\$626,980	8.7%	\$432,406	\$54,234	\$362	0.06%	0.7%
201	Meat products	500	\$2,483,498	\$21,871,360	\$8,956,331	2.6%	\$358,467	\$228,692	\$915	0.01%	0.4%
202	Dairy products	500	\$3,358,216	\$19,094,397	\$15,094,385	3.4%	\$636,303	\$318,817	\$1,918	0.01%	0.4%
203	Preservd fruits & vegetables	500	\$2,057,534	\$13,298,874	\$9,121,313	4.0%	\$330,163	\$363,623	\$1,117	0.01%	0.3%
204	Grain mill products	500	\$2,850,176	\$15,246,146	\$9,680,093	3.3%	\$503,441	\$319,645	\$1,231	0.01%	0.4%
205	Bakery products	500	\$3,671,005	\$6,776,815	\$2,270,290	3.7%	\$248,907	\$83,386	\$1,080	0.05%	1.3%
206	Sugar and confection. prods	500	\$1,507,294	\$5,665,724	\$6,274,334	3.6%	\$205,900	\$228,017	\$1,456	0.02%	0.6%
207	Fats and oils	500	\$857,689	\$4,164,853	\$17,798,517	3.5%	\$144,248	\$616,445	\$1,916	0.01%	0.3%
208	Beverages	500	\$3,427,274	\$18,683,495	\$10,514,066	4.7%	\$885,475	\$498,298	\$1,573	0.01%	0.7%
209	Misc. food products	500	\$3,924,958	\$15,725,677	\$4,590,098	3.1%	\$492,202	\$143,667	\$1,032	0.02%	0.7%
211	Cigarettes	1000	\$552,493	\$25,695,548	\$2,569,554,800	4.0%	\$1,032,237	\$103,223,683	\$55,249	0.00%	0.1%
212	Cigars	500	\$53,913	\$76,374	\$1,909,350	4.0%	\$3,068	\$76,702	\$1,172	0.06%	1.5%
213	Chewing & smoking tobacco	500	\$90,246	\$391,541	\$21,752,278	4.0%	\$15,729	\$873,829	\$3,471	0.02%	0.4%
214	Tobacco stemm. & rebying	500	\$94,976	\$537,268	\$29,848,222	4.0%	\$21,583	\$1,199,057	\$3,275	0.01%	0.3%
221	Brdwren fab. mills, cotton	1000	\$1,041,062	\$6,018,357	\$15,713,726	4.0%	\$237,725	\$620,692	\$2,850	0.02%	0.5%
222	Broadwoven fabric mills	500	\$825,069	\$1,615,840	\$5,404,147	2.8%	\$44,729	\$149,594	\$2,028	0.04%	1.4%
223	Brdwren fab. mills, wool	500	\$86,335	\$462,121	\$5,776,513	2.8%	\$12,792	\$159,901	\$1,007	0.02%	0.6%
224	Narrow fabric mills	500	\$479,645	\$806,096	\$3,448,690	3.2%	\$25,403	\$109,496	\$1,849	0.05%	1.7%
225	Knitting mills	500	\$2,199,261	\$6,047,280	\$3,597,430	2.9%	\$173,600	\$103,272	\$1,214	0.03%	1.2%
226	Tex. finishing, except wool	500	\$912,515	\$3,223,076	\$4,235,317	2.8%	\$90,367	\$118,748	\$1,110	0.03%	0.9%
227	Carpets and rugs	500	\$473,767	\$2,065,927	\$5,177,762	2.8%	\$57,329	\$143,683	\$2,926	0.02%	0.8%
228	Yarn and thread mills	500	\$1,541,008	\$2,447,819	\$8,354,331	2.0%	\$48,127	\$164,256	\$2,926	0.04%	1.8%
229	Misc. textile goods	500	\$1,294,370	\$3,747,540	\$4,445,480	2.8%	\$105,565	\$125,225	\$1,358	0.03%	1.1%
231	Men's & boys' suits & coats	500	\$285,711	\$705,937	\$2,881,376	0.9%	\$6,530	\$26,653	\$1,070	0.04%	4.0%
232	Men's & boys' furnishings	500	\$2,769,842	\$5,102,159	\$3,171,012	2.7%	\$138,566	\$86,120	\$1,446	0.03%	1.7%
233	Women's & misses' outerwear	500	\$3,544,053	\$14,309,804	\$1,369,746	2.6%	\$369,119	\$40,491	\$401	0.03%	1.0%
234	Women's & children's undergarments	500	\$410,244	\$1,109,998	\$3,775,503	2.4%	\$26,800	\$91,158	\$1,233	0.03%	1.4%
235	Hats, caps, & millinery	500	\$255,378	\$615,079	\$1,649,005	3.9%	\$24,142	\$64,723	\$694	0.04%	1.1%
236	Girls' & children's outerwear	500	\$407,657	\$1,382,929	\$2,669,747	2.0%	\$27,306	\$52,713	\$733	0.03%	1.4%
237	Fur goods	500	\$23,958	\$142,828	\$1,027,540	2.6%	\$3,654	\$26,286	\$180	0.02%	0.7%
238	Misc. apparel & accessories	500	\$538,584	\$1,480,734	\$1,580,292	2.6%	\$38,050	\$40,608	\$591	0.04%	1.5%
239	Misc. fab. textile prods	500	\$3,534,665	\$11,758,209	\$1,304,873	2.6%	\$306,884	\$34,057	\$409	0.03%	1.2%
241	Logging	500	\$1,931,225	\$13,244,206	\$929,614	3.9%	\$516,390	\$36,246	\$136	0.01%	0.4%
242	Sawmills & planing mills	500	\$5,204,162	\$2,910,249	\$1,826,529	4.3%	\$684,700	\$124,991	\$887	0.07%	0.9%
243	Millwork & plywood	500	\$7,638,094	\$16,491,731	\$1,826,529	3.6%	\$594,072	\$65,796	\$814	0.04%	1.2%
244	Wood containers	500	\$1,826,524	\$3,748,376	\$1,369,020	3.7%	\$137,252	\$50,129	\$666	0.05%	1.3%
245	Wood bldings & mobile homes	500	\$2,492,973	\$3,871,282	\$4,950,488	3.8%	\$145,465	\$186,017	\$2,519	0.05%	1.4%
249	Misc. wood products	500	\$2,644,679	\$6,955,302	\$2,178,297	3.9%	\$269,561	\$84,423	\$776	0.04%	0.9%
251	Household furniture	500	\$4,830,833	\$10,807,198	\$2,073,124	3.2%	\$345,797	\$66,334	\$911	0.04%	1.4%

**Table VIII-4 Estimated Economic Impact Under Worst-Case Scenarios, of the  
Ergonomics Program Standard on Firms Meeting SBA Size Criteria**

SIC	Industry	SBA size (Number of Employees)*	Annualized Compliance Costs for SBA Establishments	Revenues for SBA Firms (\$1,000s)	Average Revenue per Firm (\$BA)	Profits as a Percentage of Revenues [e]	Profits for SBA Firms (\$1,000s)	Average Profit per Firm (\$BA)	Average Cost per Firm (\$BA)	For all small firms	
										Annualized Com- pliance Costs as a Percentage of Revenues—SBA (percent)	Annualized Com- pliance Costs as a Percentage of Profits—SBA (percent)
252	Office furniture	500	\$1,291,889	\$2,732,201	\$3,012,350	3.8%	\$104,776	\$115,519	\$1,309	0.04%	1.1%
253	Pub bldg. & related furn.	500	\$1,008,885	\$2,252,316	\$5,819,938	4.1%	\$91,782	\$237,162	\$2,344	0.04%	1.0%
254	Partitions and fixtures	500	\$2,754,129	\$6,322,138	\$2,089,272	3.7%	\$234,829	\$77,604	\$953	0.04%	1.2%
259	Misc. furniture and fixtures	500	\$1,042,016	\$2,843,495	\$2,117,271	3.2%	\$89,618	\$66,730	\$734	0.04%	1.1%
261	Pulp mills	750	\$451,825	\$5,790,710	\$134,667,674	4.5%	\$260,635	\$6,061,288	\$10,508	0.01%	0.2%
262	Paper mills	750	\$4,711,179	\$35,582,333	\$191,302,866	4.8%	\$1,690,161	\$9,086,886	\$25,329	0.01%	0.3%
263	Paperboard mills	750	\$1,700,828	\$19,869,962	\$196,732,297	4.5%	\$894,332	\$396,277	\$16,840	0.03%	0.2%
265	Paperbld. containers & boxes	500	\$6,614,525	\$14,020,165	\$8,670,479	4.6%	\$640,780	\$396,277	\$2,598	0.03%	0.7%
267	Misc. cnvrt'd paper products	500	\$5,690,027	\$15,070,727	\$6,820,292	4.3%	\$670,269	\$293,591	\$2,021	0.07%	1.8%
271	Newspapers	500	\$6,097,033	\$7,829,630	\$1,125,756	3.8%	\$297,489	\$42,773	\$750	0.07%	1.8%
272	Periodicals	500	\$1,858,408	\$11,989,180	\$2,200,657	3.8%	\$455,589	\$83,625	\$527	0.01%	0.4%
273	Books	500	\$1,881,460	\$8,172,158	\$2,457,053	4.3%	\$366,256	\$110,119	\$434	0.02%	0.5%
274	Miscellaneous publishing	500	\$1,271,575	\$5,302,578	\$1,795,050	4.5%	\$237,290	\$80,328	\$401	0.02%	0.5%
275	Commercial printing	500	\$15,843,451	\$44,739,282	\$1,315,823	3.4%	\$1,540,599	\$45,310	\$468	0.04%	1.0%
276	Manifold business forms	500	\$1,504,029	\$3,614,775	\$5,561,192	3.4%	\$121,095	\$186,300	\$1,903	0.03%	1.0%
277	Greeting cards	500	\$199,647	\$856,946	\$6,967,041	3.8%	\$32,560	\$264,715	\$1,490	0.02%	0.6%
278	Blankbooks & bookbinding	500	\$1,558,022	\$2,534,882	\$1,749,401	3.9%	\$99,828	\$68,894	\$1,006	0.06%	1.5%
279	Printing trade services	500	\$1,521,084	\$3,736,702	\$1,124,497	3.6%	\$133,797	\$40,264	\$451	0.04%	1.1%
281	Indust. inorganic chemicals	1000	\$2,210,991	\$30,002,480	\$50,087,613	4.5%	\$1,348,616	\$2,251,445	\$3,707	0.01%	0.2%
282	Plastics mat. & synthetics	750	\$2,930,842	\$7,333,971	\$100,234,215	4.5%	\$2,577,543	\$4,506,194	\$5,200	0.01%	0.1%
283	Drugs	500	\$2,026,527	\$14,377,569	\$11,576,143	4.8%	\$688,184	\$554,093	\$1,362	0.01%	0.2%
284	Soap, clurs. & toilet goods	500	\$1,937,045	\$13,947,232	\$6,619,474	4.4%	\$613,851	\$291,339	\$835	0.01%	0.3%
285	Paints & allied products	500	\$1,130,554	\$6,934,916	\$6,147,975	3.8%	\$260,059	\$230,549	\$821	0.01%	0.4%
286	Indust. organic chemicals	500	\$1,790,244	\$8,875,050	\$18,842,994	4.5%	\$398,267	\$845,578	\$2,248	0.01%	0.3%
287	Agricultural chemicals	500	\$652,941	\$5,064,778	\$7,976,028	3.8%	\$191,034	\$300,840	\$761	0.01%	0.3%
289	Misc. chemical products	500	\$1,972,137	\$11,248,653	\$6,784,471	4.8%	\$535,062	\$322,715	\$868	0.01%	0.3%
291	Petroleum refining	1500	\$2,633,929	\$145,808,878	\$837,982,057	2.9%	\$4,155,553	\$23,882,489	\$15,193	0.00%	0.1%
295	Asphalt paving & roofing mat.	500	\$1,078,661	\$4,484,234	\$7,498,719	3.9%	\$175,673	\$293,768	\$1,077	0.01%	0.4%
299	Misc. pet. & coal prod.	500	\$389,654	\$3,602,880	\$1,017,982	4.7%	\$170,723	\$522,088	\$926	0.01%	0.2%
301	Tires and inner tubes	1000	\$2,023,808	\$12,649,425	\$110,959,868	4.0%	\$509,114	\$4,465,916	\$17,753	0.02%	0.4%
302	Rubber & plastics footwear	1000	\$196,589	\$688,879	\$14,058,755	4.0%	\$27,726	\$565,837	\$4,078	0.03%	0.7%
305	Hose, blng. and gaskets	500	\$1,017,513	\$2,376,018	\$3,876,049	4.0%	\$94,966	\$154,919	\$1,340	0.03%	0.9%
306	Fab. rubber prod., n.e.c.	500	\$2,189,498	\$5,779,201	\$4,274,557	4.0%	\$232,601	\$172,042	\$1,352	0.03%	0.8%
308	Misc. plastics, n.e.c.	500	\$15,360,776	\$50,183,465	\$4,687,853	4.0%	\$2,020,849	\$188,776	\$1,210	0.03%	0.6%
311	Leather tan. & finishing	500	\$114,762	\$964,049	\$3,171,214	1.7%	\$16,630	\$54,703	\$1,244	0.04%	2.3%
313	Footwear cut stock	500	\$69,963	na	na	2.2%	na	na	\$1,030	na	na
314	Footwear, except rubber	500	\$712,528	\$998,863	\$3,351,889	2.3%	\$23,410	\$78,557	\$1,995	0.06%	2.5%
315	Leather gloves & mittens	500	\$104,912	\$65,592	\$1,261,385	2.2%	\$1,441	\$27,710	\$1,842	0.05%	6.6%
316	Luggage	500	\$188,039	\$650,092	\$2,600,368	2.9%	\$19,015	\$76,061	\$738	0.03%	1.0%
317	Hudgags & prnal leather gds.	500	\$156,358	\$321,156	\$1,514,988	2.2%	\$11,449	\$33,281	\$465	0.03%	1.4%
319	Leather goods, n.e.c.	500	\$252,722	\$555,521	\$1,368,278	2.2%	\$12,203	\$30,058	\$628	0.05%	2.1%
321	Flat glass	1000	\$524,469	\$2,709,081	\$44,411,164	4.9%	\$133,468	\$2,187,995	\$8,704	0.02%	0.4%
322	Glass, pressed or blown	750	\$2,308,237	\$9,244,687	\$18,905,290	4.9%	\$455,456	\$931,403	\$4,720	0.02%	0.5%
323	Prod. of purchased glass	323	\$1,423,171	\$2,883,972	\$1,988,946	5.1%	\$145,641	\$100,442	\$890	0.04%	0.9%
324	Cement, hydraulic	750	\$727,441	\$4,720,190	\$32,779,097	4.9%	\$232,549	\$1,614,921	\$5,117	0.02%	0.3%
325	Structural clay products	500	\$1,151,767	\$1,261,365	\$3,234,269	5.4%	\$67,909	\$174,125	\$2,130	0.07%	1.2%
326	Pottery & related prod.	500	\$900,555	\$1,218,562	\$1,082,204	4.9%	\$60,035	\$53,317	\$767	0.07%	1.4%
327	Concrete & plast. pldts	500	\$8,138,716	\$19,732,738	\$3,222,724	4.8%	\$952,603	\$155,603	\$1,080	0.03%	0.7%
328	Cut stone & stone prod.	500	\$535,838	\$1,016,183	\$965,036	5.0%	\$51,063	\$48,493	\$507	0.05%	1.0%
329	Misc. nonmet. mineral prod.	500	\$1,686,396	\$4,522,903	\$3,852,558	5.0%	\$223,990	\$190,792	\$1,143	0.03%	0.6%

**Table VIII-4 Estimated Economic Impact Under Worst-Case Scenarios, of the  
Ergonomics Program Standard on Firms Meeting SBA Size Criteria**

SIC	Industry	SBA size (Number of Employees)*	Annualized Compliance Costs for SBA Establishments	Revenues for SBA Firms (\$1,000s)	Average Revenue per Firm (\$BA)	Profits as a Percentage of Revenues [c]	Profits for SBA Firms (\$1,000s)	Average Profit per Firm (\$BA)	Average Cost per Firm (\$BA)	For all small firms	
										Annualized Com- pliance Costs as a Percentage of Revenues—SBA (percent)	Annualized Com- pliance Costs as a Percentage of Profits—SBA (percent)
331	Basic steel products	750	\$6,902,635	\$69,010,676	\$71,587,838	4.3%	\$2,971,554	\$3,082,524	\$7,199	0.01%	0.2%
332	Iron and steel foundries	500	\$2,188,182	\$4,870,320	\$5,316,943	4.6%	\$221,896	\$242,244	\$2,064	0.04%	0.9%
333	Primary nonfer. metals	750	\$1,072,534	\$17,465,720	\$104,585,150	3.9% [d]	\$789,048	\$4,724,837	\$6,422	0.01%	0.1%
334	Secondary nonfer. metals	500	\$480,535	\$4,175,342	\$19,152,945	3.9%	\$161,795	\$742,177	\$1,768	0.01%	0.2%
335	Nonfer. rolling & drawing	750	\$4,642,135	\$45,476,554	\$58,985,857	4.9%	\$2,211,228	\$2,868,000	\$6,070	0.01%	0.2%
336	Nonfer. foundries (castings)	500	\$2,106,085	\$5,180,943	\$3,491,201	4.5%	\$222,907	\$156,945	\$1,313	0.04%	0.8%
339	Misc. primary metal products	750	\$850,154	\$4,169,327	\$5,066,740	4.8%	\$201,967	\$245,403	\$1,036	0.02%	0.4%
341	Met. cans & ship. containers	500	\$1,340,069	\$1,621,160	\$8,487,749	4.1%	\$308,517	\$344,014	\$3,363	0.04%	1.0%
342	Cutlery, handls., & hardware	500	\$2,591,818	\$6,691,129	\$3,168,148	4.6% [e]	\$308,517	\$146,078	\$1,120	0.04%	0.8%
343	Plumbing & heating fixtures	500	\$1,115,960	\$3,157,332	\$5,500,578	4.8%	\$1,500,644	\$262,446	\$1,701	0.03%	0.6%
344	Fab. struct. metal products	500	\$12,175,304	\$37,977,730	\$3,142,031	4.3%	\$1,626,612	\$134,575	\$942	0.03%	0.7%
345	Screw machine products	500	\$3,124,799	\$8,090,741	\$3,399,471	4.4%	\$357,767	\$150,322	\$1,245	0.04%	0.8%
346	Met. forgings & stampings	500	\$5,798,684	\$18,722,856	\$5,900,679	4.6%	\$854,915	\$269,434	\$1,660	0.03%	0.8%
347	Metal services, n.e.c.	500	\$4,180,962	\$9,995,919	\$1,930,459	5.0%	\$494,858	\$95,569	\$782	0.04%	0.8%
348	Ordnance and access., n.e.c.	500	\$384,830	\$733,846	\$1,916,047	4.5% [d]	\$33,362	\$87,106	\$932	0.05%	1.1%
349	Misc. fab. metal products	500	\$7,451,850	\$20,152,405	\$3,139,004	4.9%	\$986,213	\$153,616	\$1,062	0.03%	0.7%
351	Engines and turbines	1000	\$2,290,030	\$16,985,636	\$56,430,684	4.0% [d]	\$687,199	\$2,283,054	\$7,629	0.01%	0.3%
352	Farm & garden machinery	500	\$1,583,707	\$4,821,398	\$3,024,716	4.7%	\$227,886	\$142,965	\$940	0.03%	0.7%
353	Construct. & related mach.	500	\$3,643,013	\$12,575,744	\$4,366,578	4.3%	\$543,864	\$188,842	\$1,148	0.03%	0.6%
354	Metalworking machinery	500	\$7,880,566	\$21,483,547	\$1,923,153	4.6%	\$986,237	\$88,286	\$680	0.04%	0.8%
355	Special industry mach.	500	\$4,186,825	\$15,982,001	\$3,696,115	4.1%	\$648,701	\$150,023	\$904	0.02%	0.6%
356	General indust. mach.	500	\$5,661,332	\$15,116,697	\$4,271,460	4.3%	\$656,138	\$185,402	\$1,362	0.03%	0.7%
357	Computer & office equip.	500	\$1,791,829	\$12,243,311	\$6,625,168	3.3%	\$403,103	\$218,129	\$899	0.01%	0.4%
358	Refrig. & serv. indust. mach.	500	\$2,854,849	\$8,739,705	\$4,721,613	3.6%	\$314,109	\$169,697	\$1,346	0.03%	0.8%
359	Industrial mach., n.e.c.	500	\$11,136,527	\$27,692,881	\$1,086,294	5.1% [e]	\$1,400,654	\$54,943	\$434	0.04%	0.8%
361	Elect. dist. equipment	750	\$1,615,579	\$11,273,986	\$14,873,332	5.2%	\$583,158	\$769,337	\$2,158	0.01%	0.3%
362	Elect. indust. apparatus	500	\$2,461,026	\$6,300,493	\$3,392,834	5.1%	\$323,830	\$174,383	\$1,144	0.03%	0.7%
363	Household appliances	500	\$645,445	\$1,916,838	\$5,756,270	5.6% [d]	\$107,177	\$321,852	\$1,568	0.03%	0.5%
364	Elect. lightng & wire equip.	500	\$2,335,322	\$7,587,353	\$4,355,541	5.7%	\$434,863	\$249,634	\$1,162	0.03%	0.5%
365	Household audio & vid. equip.	750	\$1,121,446	\$3,716,113	\$17,721,076	5.0%	\$689,969	\$891,433	\$1,460	0.01%	0.2%
366	Communications equipment	750	\$4,824,912	\$7,675,808	\$30,039,483	5.8% [e]	\$3,319,137	\$1,728,717	\$2,532	0.01%	0.1%
367	Electric compnits & access.	500	\$5,499,452	\$23,959,350	\$4,279,984	5.6%	\$1,336,749	\$238,790	\$889	0.02%	0.4%
369	Misc. elect. equipment	500	\$2,024,078	\$6,460,095	\$4,403,609	5.9%	\$380,534	\$259,396	\$1,213	0.03%	0.5%
371	Motor vehicles & equip.	500	\$8,943,314	\$22,926,322	\$5,821,819	3.5%	\$802,758	\$203,849	\$1,931	0.03%	0.9%
372	Aircraft and parts	1000	\$10,748,768	\$93,016,989	\$64,238,252	4.7% [e]	\$4,339,753	\$2,997,067	\$7,436	0.01%	0.2%
373	Ship, boat blading and repair [a]	500	\$2,267,952	\$3,523,310	\$1,358,254	3.6%	\$128,325	\$49,470	\$859	0.06%	1.7%
374	Railroad equipment	1000	\$869,095	\$6,654,526	\$43,779,776	3.7%	\$244,554	\$1,608,907	\$5,771	0.01%	0.4%
375	Motorcycles & bicycles	500	\$223,223	\$883,486	\$2,531,479	3.7%	\$33,070	\$94,756	\$615	0.02%	0.6%
376	Guided missiles	1000	\$1,721,893	\$18,052,173	\$231,438,115	3.7%	\$675,714	\$8,663,001	\$22,286	0.01%	0.3%
379	Misc. transportation equip.	500	\$835,625	\$3,155,211	\$3,063,312	3.7% [e]	\$115,388	\$112,027	\$761	0.02%	0.7%
381	Arch. & navigation equipment	750	\$3,473,317	\$30,132,161	\$51,158,168	4.7% [e]	\$1,416,212	\$2,404,434	\$5,905	0.01%	0.2%
382	Meas. & controlling devices	500	\$3,484,911	\$14,397,362	\$3,508,984	5.6%	\$808,467	\$197,043	\$763	0.02%	0.4%
384	Medical instruments & supplies	500	\$3,097,673	\$14,243,807	\$3,717,069	5.3%	\$756,732	\$197,477	\$730	0.02%	0.4%
385	Ophthalmic goods	500	\$289,433	\$775,726	\$3,717,069	3.7%	\$28,508	\$56,008	\$511	0.03%	0.9%
386	Photo. equip. & supplies	500	\$484,318	\$2,498,427	\$3,934,531	4.0%	\$99,937	\$157,381	\$693	0.02%	0.4%
387	Watches, clocks, & parts	500	\$56,467	\$282,180	\$2,121,654	5.1% [d]	\$14,281	\$107,376	\$409	0.02%	0.4%
391	Jewelry, silverware, and plate	500	\$718,697	\$4,852,914	\$1,704,571	3.3%	\$161,574	\$56,752	\$257	0.02%	0.5%
393	Musical instruments	500	\$319,673	\$766,619	\$1,432,933	3.8% [d]	\$29,164	\$54,512	\$586	0.04%	1.1%
394	Toys and sporting goods	500	\$1,760,361	\$7,306,766	\$2,141,491	3.7%	\$267,402	\$78,371	\$752	0.02%	0.7%
395	Office and art supplies	500	\$447,103	\$1,893,745	\$1,910,943	3.8% [d]	\$72,042	\$72,697	\$448	0.02%	0.6%

**Table VIII-4 Estimated Economic Impact Under Worst-Case Scenarios, of the Ergonomics Program Standard on Firms Meeting SBA Size Criteria**

For all small firms													
SIC	Industry	SBA size (Number of Employees)*	Annualized Compliance Costs for SBA Establishments		Revenues for SBA Firms (\$1,000s)	Average Revenue per Firm (\$BA)	Profits as a Percentage of Revenues [c]	Profits for SBA Firms (\$1,000s)	Average Profit per Firm (\$BA)	Average Cost per Firm (\$BA)	Annualized Compliance Costs as a Percentage of		
			Costs for SBA Establishments	Costs for SBA Establishments							Revenues—SBA (percent)	Profits—SBA (percent)	
396	Costume jewelry & notions	500	\$299,582	\$1,300,768	\$1,192,271	\$49,484	\$45,357	3.8%	\$49,484	\$45,357	\$278	0.02%	0.6%
399	Misc. manufactures	500	\$3,324,791	\$12,545,710	\$1,443,695	\$510,610	\$58,758	4.1%	\$510,610	\$58,758	\$383	0.03%	0.7%
411	Local & suburban trans.	500	\$8,173,462	\$5,876,806	\$693,674	\$258,515	\$30,514	4.4%	\$258,515	\$30,514	\$916	0.13%	3.0%
412	Taxis	500	\$634,660	\$1,105,735	\$334,160	\$49,844	\$15,063	4.5%	\$49,844	\$15,063	\$193	0.06%	1.3%
413	Intercity & rural bus trans.	500	\$467,639	\$385,677	\$2,047,822	\$31,480	\$110,070	5.4%	\$31,480	\$110,070	\$1,213	0.06%	1.1%
414	Bus charter service	500	\$1,139,408	\$1,457,057	\$1,112,257	\$66,962	\$51,116	4.6%	\$66,962	\$51,116	\$853	0.08%	1.7%
415	School buses	500	\$3,945,981	\$2,135,801	\$655,154	\$97,179	\$29,809	4.6%	\$97,179	\$29,809	\$982	0.15%	3.3%
417	Bus terminals	100	\$22,362	\$9,269	\$178,250	\$418	\$8,035	4.5%	\$418	\$8,035	\$399	0.22%	5.0%
421	Tirking & Courier Service	100	\$37,789,609	\$70,008,631	\$682,252	\$2,407,318	\$23,460	3.4%	\$2,407,318	\$23,460	\$334	0.05%	1.4%
422	Pub. warehousing & storage	1000	\$8,804,368	\$5,737,546	\$645,103	\$611,567	\$68,762	10.7%	\$611,567	\$68,762	\$1,003	0.16%	1.5%
423	Trucking terminal fac.	500	\$69,378	\$38,086	\$528,972 [b]	\$1,491	\$20,703	3.9%	\$1,491	\$20,703	\$867	0.16%	4.2%
430	U.S. Postal Service	na	na	na	na	na	na	na	na	na	na	na	na
431	Air trans., scheduled	1500	\$24,340,198	\$139,896,879	\$84,888,883	\$4,977,185	\$3,020,136	5.3% x	\$4,977,185	\$3,020,136	\$14,848	0.02%	0.5%
452	Air trans., nonsched.	1500	\$780,090	\$4,596,451	\$2,785,728	\$243,612	\$147,644	3.6%	\$243,612	\$147,644	\$479	0.02%	0.3%
458	Airports and services	100	\$1,553,070	\$2,548,936	\$815,921	\$97,497	\$31,209	3.8%	\$97,497	\$31,209	\$416	0.05%	1.3%
461	Pipelines, except natural gas	1500	\$1,033,860	\$8,949,097	\$88,604,921	\$85,965	\$5,801,632	6.3%	\$85,965	\$5,801,632	\$10,289	0.01%	0.2%
472	Pass. trans. arrangements	100	\$2,638,317	\$7,842,150	\$291,573	\$190,399	\$7,079	2.4%	\$190,399	\$7,079	\$85	0.03%	1.2%
473	Freight trans. arrangements	1000	\$6,786,441	\$13,557,555	\$1,127,447	\$521,966	\$43,407	3.9%	\$521,966	\$43,407	\$577	0.05%	1.3%
474	Rental of railroad cars	20	\$13,504	\$227,179	\$3,112,041	\$7,704	\$105,530	3.4%	\$7,704	\$105,530	\$136	0.00%	0.1%
478	Misc. trans. services	1500	\$1,727,132	\$1,199,860	\$597,838	\$64,961	\$32,367	5.4%	\$64,961	\$32,367	\$695	0.12%	2.1%
481	Telephone communication	1500	\$14,854,888	\$208,432,617	\$30,966,070	\$12,368,636	\$1,837,563	5.9%	\$12,368,636	\$1,837,563	\$2,242	0.01%	0.1%
482	Telegraph & other comm.	100	\$50,194	\$639,961	\$1,587,993	\$35,704	\$88,596	5.6%	\$35,704	\$88,596	\$114	0.01%	0.1%
483	Radio & TV broadcasting	100	\$1,169,877	\$5,760,487	\$828,013	\$380,357	\$54,673	6.6%	\$380,357	\$54,673	\$151	0.02%	0.3%
484	Cable & other pay TV services	100	\$975,082	\$4,447,226	\$2,309,048	\$121,187	\$62,922	2.7%	\$121,187	\$62,922	\$245	0.01%	0.4%
489	Communication serv., n.e.c.	100	\$102,117	\$2,012,842	\$1,476,773	\$122,783	\$90,083	6.1%	\$122,783	\$90,083	\$72	0.00%	0.1%
491	Electric services	100	\$1,984,774	\$12,729,512	\$10,459,747	\$1,586,946	\$1,303,982	12.5%	\$1,586,946	\$1,303,982	\$483	0.00%	0.0%
492	Gas product. & distribution	10	\$219,701	\$2,605,588	\$5,639,801	\$205,348	\$444,476	7.9%	\$205,348	\$444,476	\$119	0.00%	0.0%
493	Comb. utility services	20	\$106,180	\$306,134	\$1,749,337	\$31,761	\$181,489	10.4%	\$31,761	\$181,489	\$122	0.01%	0.1%
494	Water supply	100	\$455,092	\$1,422,434	\$417,626	\$173,893	\$51,055	12.2%	\$173,893	\$51,055	\$126	0.03%	0.2%
495	Sanitary services	100	\$1,768,449	\$5,967,715	\$1,250,569	\$372,958	\$78,156	6.2%	\$372,958	\$78,156	\$293	0.02%	0.4%
496	Steam & air-cond. supplies	100	\$16,197	\$50,218	\$1,091,696	\$5,210	\$113,261	10.4%	\$5,210	\$113,261	\$258	0.02%	0.2%
497	Irrigation systems	100	\$30,402	\$71,818	\$203,450	\$7,451	\$21,107	10.4%	\$7,451	\$21,107	\$84	0.04%	0.4%
501	Motor vehicles	100	\$17,794,990	\$243,498,263	\$7,338,706	\$5,332,451	\$160,713	2.2%	\$5,332,451	\$160,713	\$437	0.01%	0.3%
502	Furn. & homefurnishings	100	\$6,371,889	\$45,558,231	\$3,107,868	\$1,040,619	\$70,988	2.3%	\$1,040,619	\$70,988	\$406	0.01%	0.6%
503	Lumber & construct. mat.	100	\$14,581,037	\$71,149,013	\$3,956,240	\$1,637,651	\$91,062	2.3%	\$1,637,651	\$91,062	\$662	0.02%	0.7%
504	Prof. & commercial equip.	100	\$16,865,174	\$117,949,440	\$2,865,424	\$3,220,156	\$78,229	2.7%	\$3,220,156	\$78,229	\$347	0.02%	0.4%
505	Met. & minerals, except pet.	100	\$6,104,097	\$88,083,233	\$10,345,693	\$2,275,420	\$267,256	2.6%	\$2,275,420	\$267,256	\$577	0.01%	0.2%
506	Electrical goods	100	\$13,183,348	\$152,717,682	\$5,334,184	\$3,829,564	\$133,761	2.5%	\$3,829,564	\$133,761	\$349	0.01%	0.3%
507	Hardware supplies	100	\$12,831,802	\$59,471,522	\$3,243,960	\$1,495,727	\$81,587	2.5%	\$1,495,727	\$81,587	\$555	0.02%	0.7%
508	Mach. equip. & supplies	100	\$32,266,054	\$185,868,942	\$3,120,491	\$5,361,954	\$90,020	2.9%	\$5,361,954	\$90,020	\$464	0.01%	0.5%
509	Misc. durable goods	100	\$10,408,783	\$114,520,585	\$3,072,234	\$3,404,665	\$91,337	3.0%	\$3,404,665	\$91,337	\$269	0.01%	0.3%
511	Paper and paper products	100	\$5,842,403	\$54,840,021	\$4,200,691	\$1,059,399	\$81,149	1.9%	\$1,059,399	\$81,149	\$333	0.01%	0.4%
512	Drugs, propriet., & sundries	100	\$2,858,374	\$37,355,268	\$6,828,751	\$1,335,379	\$244,128	3.6%	\$1,335,379	\$244,128	\$417	0.01%	0.2%
513	Apparel and notions	100	\$5,356,497	\$77,016,584	\$3,898,982	\$1,908,792	\$96,633	2.5%	\$1,908,792	\$96,633	\$254	0.01%	0.3%
514	Groceries & related products	100	\$21,297,198	\$218,814,846	\$6,267,970	\$3,868,372	\$110,810	1.8%	\$3,868,372	\$110,810	\$525	0.01%	0.5%
515	Farm-prod. raw materials	100	\$2,399,331	\$95,011,629	\$13,088,804	\$26,913,704	\$3,707,633	28.3%	\$26,913,704	\$3,707,633	\$268	0.00%	0.0%
516	Chemicals & allied prod.	100	\$5,212,117	\$70,151,235	\$6,688,714	\$2,163,096	\$206,245	3.1%	\$2,163,096	\$206,245	\$369	0.00%	0.0%
517	Petrol. & petrol. prod.	100	\$4,993,945	\$159,830,273	\$18,899,169	\$2,039,195	\$241,125	1.3%	\$2,039,195	\$241,125	\$436	0.01%	0.2%
518	Beer, wine, & dist. bev.	100	\$4,589,822	\$28,349,716	\$7,805,539	\$996,809	\$274,452	3.5%	\$996,809	\$274,452	\$1,048	0.01%	0.4%
519	Misc. nondurable goods	100	\$13,263,715	\$107,195,186	\$2,420,357	\$2,476,936	\$55,927	2.3%	\$2,476,936	\$55,927	\$259	0.01%	0.5%

**Table VIII-4 Estimated Economic Impact Under Worst-Case Scenarios, of the  
Ergonomics Program Standard on Firms Meeting SBA Size Criteria**

SIC	Industry	SBA size (Number of Employees)*	Annualized Compliance Costs for SBA Establishments	Revenues for SBA Firms (\$1,000s)	Average Revenue per Firm (\$)	Profits as a Percentage of Revenues [e]	Profits for SBA Firms (\$1,000s)	Average Profit per Firm (\$)	Average Cost per Firm (\$)	For all small firms	
										Annualized Com- pliance Costs as a Percentage of Revenues-SBA (percent)	Annualized Com- pliance Costs as a Percentage of Profits-SBA (percent)
521	Lumber & other bldg mat.	100	\$15,104,187	\$34,646,566	\$2,041,155	2.3%	\$796,871	\$46,947	\$711	0.03%	1.5%
523	Paint, glass, wallpaper str	100	\$2,952,482	\$4,198,092	\$746,327	2.3%	\$94,457	\$16,792	\$333	0.04%	2.0%
525	Hardware stores	100	\$4,522,768	\$9,295,593	\$747,354	2.2%	\$199,855	\$16,068	\$332	0.04%	2.1%
526	Retail nurseries and gardens	100	\$3,976,459	\$6,916,627	\$685,629	2.5% [e]	\$169,457	\$16,798	\$359	0.05%	2.1%
527	Mobile home dealers	100	\$2,754,481	\$9,308,186	\$2,506,918	3.2%	\$300,189	\$80,848	\$635	0.03%	0.8%
531	Department stores	500	\$107,125,395	\$14,920,000	\$90,424,242	2.8%	\$417,760	\$2,531,879	\$10,568	0.01%	0.4%
533	Variety stores	500	\$5,246,950	\$2,014,120	\$318,168	3.1%	\$62,438	\$16,063	\$546	0.01%	3.4%
539	Misc. gen. merchandise str.	500	\$4,662,095	\$6,172,672	\$867,314	2.2%	\$135,799	\$19,081	\$349	0.04%	1.8%
541	Grocery stores	500	\$88,221,377	\$118,331,661	\$1,354,669	1.4%	\$1,597,477	\$18,288	\$761	0.06%	4.2%
542	Meat and fish markets	500	\$1,668,617	\$5,312,763	\$698,037	2.5%	\$132,819	\$17,451	\$220	0.03%	1.3%
543	Fruit & vegetable markets	500	\$556,557	\$2,156,122	\$670,436	1.4% [d]	\$30,418	\$9,458	\$173	0.03%	1.8%
544	Candy, nut, & confection str	500	\$804,252	\$1,075,952	\$356,630	4.1%	\$43,845	\$14,533	\$203	0.06%	1.4%
545	Dairy products stores	500	\$375,186	\$555,577	\$357,975	1.4% [d]	\$7,838	\$5,050	\$155	0.04%	3.1%
546	Retail bakeries	500	\$4,696,328	\$5,263,348	\$310,632	3.2%	\$168,427	\$9,940	\$255	0.08%	2.6%
549	Misc. food stores	100	\$1,497,845	\$3,638,480	\$485,584	1.4%	\$86,414	\$11,533	\$157	0.03%	1.4%
551	New and used car dealers	100	\$27,553,404	\$292,038,764	\$14,022,797	2.2% [e]	\$3,577,475	\$171,779	\$1,240	0.01%	0.7%
552	Used car dealers	1000	\$1,643,727	\$26,046,018	\$1,204,329	2.5%	\$638,127	\$29,506	\$76	0.01%	0.3%
553	Auto & home supply stores	100	\$16,983,595	\$19,937,515	\$734,699	2.3%	\$453,578	\$16,714	\$419	0.06%	2.5%
554	Gas service stations	100	\$20,398,832	\$92,849,080	\$1,661,818	1.6%	\$1,485,585	\$26,589	\$245	0.01%	0.9%
555	Boat dealers	100	\$1,855,789	\$6,941,415	\$1,497,285	2.0%	\$135,358	\$29,197	\$378	0.03%	1.3%
556	Rec. vehicle dealers	20	\$960,565	\$3,776,117	\$1,564,906	2.1%	\$77,410	\$32,081	\$375	0.02%	1.2%
557	Motorcycle dealers	100	\$400,981	\$6,364,205	\$1,722,849	2.8%	\$178,198	\$48,240	\$108	0.01%	0.2%
559	Auto dealers, n.e.c.	500	\$105,020	\$1,290,175	\$1,054,926	2.6% [e]	\$33,549	\$27,428	\$86	0.01%	0.3%
561	Men's & boys' clothing str	100	\$1,735,648	\$4,530,201	\$734,468	1.4%	\$62,290	\$10,099	\$142	0.02%	1.4%
562	Women's clothing stores	100	\$5,068,226	\$8,659,216	\$521,388	1.1%	\$95,251	\$5,735	\$139	0.03%	2.4%
563	Wm's access & specialty str	100	\$912,098	\$1,692,509	\$424,294	1.8% [d]	\$31,255	\$7,835	\$115	0.03%	1.5%
564	Child's & infants' wear str	100	\$893,447	\$1,349,923	\$442,743	1.8%	\$24,929	\$8,176	\$181	0.04%	2.2%
565	Family clothing stores	100	\$7,587,500	\$5,923,495	\$811,771	2.2%	\$127,355	\$17,453	\$436	0.05%	2.5%
566	Shoe stores	100	\$4,865,601	\$5,381,323	\$720,198	2.4%	\$130,497	\$17,465	\$90	0.03%	1.1%
569	Misc. apparel stores	500	\$820,287	\$3,709,783	\$486,401	2.0%	\$74,196	\$9,728	\$272	0.02%	0.9%
571	Furniture & homefurnishing str	100	\$23,391,313	\$42,126,313	\$837,185	2.4%	\$1,030,187	\$20,473	\$385	0.05%	1.9%
572	Household appliance str	100	\$3,014,842	\$7,560,615	\$851,037	2.2%	\$168,224	\$18,936	\$323	0.04%	1.7%
573	Radio, TV, & compr str	100	\$8,489,629	\$25,990,643	\$1,073,328	2.1%	\$550,911	\$22,751	\$233	0.02%	1.0%
581	Eating & drinking places	500	\$139,237,475	\$168,250,630	\$469,053	3.0%	\$5,044,847	\$14,064	\$325	0.07%	2.3%
591	Drug stores	100	\$13,932,223	\$30,098,137	\$1,276,589	2.2%	\$654,634	\$27,766	\$347	0.03%	1.3%
592	Liquor stores	1000	\$1,667,710	\$21,457,553	\$803,413	1.6%	\$337,956	\$12,654	\$68	0.01%	0.5%
593	Used merchandise stores	500	\$4,154,670	\$6,333,307	\$327,184	4.8%	\$305,582	\$15,787	\$195	0.06%	1.5%
594	Misc. shopping goods str.	500	\$23,314,245	\$46,836,435	\$506,822	2.6%	\$1,236,483	\$13,380	\$195	0.04%	1.5%
596	Nonstore retailers	100	\$8,364,985	\$21,621,142	\$831,934	2.5%	\$537,863	\$20,696	\$291	0.03%	1.4%
598	Fuel dealers	100	\$3,969,173	\$11,265,014	\$1,502,002	1.8%	\$206,800	\$27,573	\$380	0.03%	1.4%
599	Retail stores, n.e.c.	100	\$10,948,496	\$30,053,132	\$392,251	3.2%	\$969,091	\$12,649	\$123	0.03%	1.0%
601	Central res. depository	10	\$1,382	\$126,998	\$25,399,600	10.8% [d]	\$13,716	\$2,743,157	\$115	0.00%	0.0%
602	Commercial banks	10	\$3,375,263	\$1,624,224	\$1,727,898	10.8% [d]	\$175,416	\$186,613	\$103	0.01%	0.1%
603	Savings institutions	10	\$903,024	\$608,115	\$1,974,399	10.8% [d]	\$65,676	\$213,235	\$106	0.01%	0.0%
606	Credit unions	10	\$773,380	\$3,500,992	\$494,582	10.8% [d]	\$378,658	\$53,415	\$74	0.01%	0.1%
608	Foreign banking	10	\$16,908	\$343,106	\$6,126,891	10.8% [d]	\$37,055	\$661,704	\$92	0.00%	0.0%
609	Banking-related functions	10	\$666,547	\$2,929,885	\$918,459	10.8% [d]	\$316,428	\$99,194	\$142	0.02%	0.1%
611	Federal credit agencies	20	\$107,461	\$1,722,770	\$1,722,770	10.8% [d]	\$13,768	\$186,059	\$96	0.01%	0.1%
614	Personal cred. institutions	20	\$1,412,949	\$3,486,159	\$856,550	15.5% [d]	\$539,193	\$132,480	\$82	0.01%	0.1%
615	Business cred. institutions	20	\$450,801	\$4,947,066	\$1,814,771	17.1% [d]	\$844,648	\$309,849	\$99	0.01%	0.0%



**Table VIII-4 Estimated Economic Impact Under Worst-Case Scenarios, of the  
Ergonomics Program Standard on Firms Meeting SBA Size Criteria**

SIC	Industry	SBA size (Number of Employees)*	Annualized Compliance Costs for SBA Establishments	Revenues for SBA Firms (\$1,000s)	Average Revenue per Firm (\$BA)	Profits as a Percentage of Revenues [c]	Profits for SBA Firms (\$1,000s)	Average Profit per Firm (\$BA)	Average Cost per Firm (\$BA)	For all small firms	
										Annualized Com- pliance Costs as a Percentage of Revenues—SBA (percent)	Annualized Com- pliance Costs as a Percentage of Profits—SBA (percent)
616	Mortgage bankers & brokers	100	\$2,755,682	\$9,639,490	\$695,722	11.7%	\$1,122,225	\$81,080	\$134	0.02%	0.2%
621	Security brokers & dealers	20	\$1,957,465	\$6,612,505	\$842,572	12.8%	\$844,196	\$107,568	\$93	0.01%	0.1%
622	Commodity contracts brokers	100	\$144,311	\$1,550,654	\$1,061,365	13.3%	\$206,476	\$213,325	\$92	0.01%	0.1%
623	Security & commod. exchanges	100	\$21,567	\$110,466	\$1,600,957	13.3%	\$14,709	\$213,174	\$211	0.01%	0.1%
628	Security & commod. services	100	\$1,824,210	\$12,130,210	\$731,044	15.3%	\$1,838,605	\$12,011	\$103	0.01%	0.1%
631	Life insurance	100	\$3,311,304	\$7,677,233	\$7,739,146	6.8%	\$523,844	\$528,069	\$326	0.00%	0.1%
632	Medical & health insur.	20	\$283,761	\$2,824,245	\$4,657,512	3.6%	\$101,867	\$167,270	\$139	0.00%	0.1%
633	Fire, marine, & casualty ins.	1500	\$12,674,215	\$304,968,860	\$140,086,752	9.1%	\$27,599,682	\$12,677,851	\$5,830	0.00%	0.0%
635	Surety insurance	20	\$53,081	\$425,650	\$2,086,520	6.8%	\$29,044	\$142,370	\$110	0.01%	0.1%
636	Title insurance	100	\$576,728	\$79,969	\$628,048	4.6%	\$17,289	\$28,576	\$243	0.04%	0.9%
637	Pension and health funds	1000	\$607,997	\$1,884,439	\$758,021	6.8%	\$128,582	\$51,722	\$240	0.03%	0.5%
639	Ins. carriers, n.e.c.	100	\$59,485	\$435,319	\$1,836,789	6.8%	\$29,703	\$125,331	\$213	0.01%	0.2%
641	Insurance agents	100	\$11,945,677	\$43,627,225	\$76,269	6.8%	\$2,977,558	\$25,680	\$98	0.03%	0.4%
651	Real estate operators	100	\$12,232,921	\$68,368,940	\$723,466	14.1%	\$9,619,754	\$101,794	\$126	0.02%	0.1%
653	RE agents and managers	100	\$13,395,872	\$50,958,708	\$452,717	13.2%	\$6,739,289	\$59,872	\$112	0.02%	0.2%
654	Title abstract offices	100	\$590,586	\$1,983,347	\$450,454	13.3%	\$263,972	\$59,953	\$124	0.03%	0.2%
655	Subdividers & developers	100	\$2,691,622	\$11,839,645	\$686,118	10.6%	\$1,256,055	\$72,789	\$147	0.02%	0.2%
671	Holding offices	100	\$1,602,500	\$9,312,324	\$1,458,012	25.4%	\$2,363,917	\$370,114	\$175	0.01%	0.0%
672	Investment offices	20	\$65,503	\$1,718,584	\$2,504,933	20.4%	\$351,041	\$511,722	\$78	0.00%	0.0%
673	Trusts	100	\$956,791	\$8,081,507	\$964,611	24.3%	\$1,963,604	\$234,376	\$111	0.01%	0.0%
679	Miscellaneous investing	20	\$667,358	\$9,524,886	\$1,309,443	21.5%	\$2,051,829	\$282,077	\$85	0.01%	0.0%
701	Hotels and motels	100	\$15,659,677	\$20,248,760	\$562,982	7.0%	\$1,407,289	\$39,127	\$379	0.03%	1.0%
702	Rooming & boarding houses	1000	\$126,188	\$427,076	\$274,294	7.0%	\$29,727	\$19,092	\$81	0.07%	0.4%
703	Camps and rec. vehicle parks	1000	\$356,537	\$2,820,658	\$403,297	7.3%	\$206,909	\$29,584	\$51	0.01%	0.2%
704	Membership-basis org. hotels	100	\$158,700	\$498,571	\$216,959	7.0%	\$34,703	\$15,101	\$66	0.03%	0.4%
721	Laundry & garment services	100	\$15,357,312	\$12,383,614	\$247,311	5.9%	\$734,487	\$14,668	\$293	0.12%	2.0%
722	Photo studios, portrait	500	\$1,123,994	\$2,406,763	\$278,014	4.5%	\$108,304	\$12,511	\$90	0.03%	0.7%
723	Beauty shops	500	\$5,279,870	\$10,443,876	\$142,666	4.4%	\$459,531	\$6,277	\$69	0.05%	1.1%
724	Barber shops	100	\$589,116	\$350,653	\$82,197	5.9%	\$20,531	\$4,813	\$134	0.16%	2.8%
725	Shoe repair	100	\$254,036	\$209,963	\$101,726	5.9%	\$12,293	\$5,956	\$123	0.12%	2.1%
726	Fun. service and crematories	100	\$2,406,472	\$7,073,950	\$590,431	7.6%	\$534,083	\$44,578	\$176	0.03%	0.4%
729	Misc. personal services	500	\$2,469,966	\$5,563,729	\$212,827	6.6%	\$365,214	\$13,970	\$88	0.04%	0.6%
731	Advertising	100	\$3,327,317	\$13,539,451	\$765,849	3.9%	\$528,472	\$29,893	\$176	0.02%	0.6%
732	Credit report & collection	100	\$1,486,449	\$3,895,290	\$674,626	5.4%	\$211,608	\$36,648	\$230	0.03%	0.6%
733	Mailing, reprod. steno., serv	100	\$5,253,896	\$16,758,103	\$500,227	4.7%	\$790,696	\$23,602	\$153	0.03%	0.6%
734	Services to buildings	500	\$12,320,964	\$16,369,158	\$258,731	3.5%	\$576,621	\$9,114	\$192	0.07%	2.1%
735	Misc. equip. rental	100	\$5,598,634	\$16,405,858	\$985,159	8.8%	\$1,451,030	\$87,133	\$254	0.03%	0.3%
736	Pers. supply services	500	\$31,666,138	\$27,321,192	\$1,103,842	3.3%	\$891,299	\$36,011	\$923	0.08%	2.6%
737	Comput. & data proc. services	500	\$23,326,437	\$84,991,310	\$1,097,682	4.9%	\$4,198,029	\$54,218	\$274	0.02%	0.5%
738	Misc. business services	500	\$18,083,738	\$43,556,800	\$557,848	5.1%	\$2,209,369	\$28,296	\$219	0.04%	0.8%
751	Auto rentals, no drivers	100	\$2,702,854	\$6,258,032	\$1,154,193	5.4%	\$340,984	\$62,889	\$282	0.02%	0.4%
752	Automobile parking	100	\$1,249,889	\$1,382,755	\$682,842	4.4%	\$60,743	\$29,996	\$194	0.03%	0.6%
753	Automotive repair shops	500	\$26,239,345	\$49,806,400	\$374,580	3.9%	\$1,922,538	\$14,459	\$194	0.05%	1.3%
754	Automotive serv., exc repair	500	\$8,761,572	\$8,124,818	\$349,680	4.4%	\$360,539	\$15,517	\$355	0.10%	2.3%
762	Electrical repair shops	100	\$4,811,885	\$6,556,781	\$384,314	4.6%	\$303,972	\$17,817	\$258	0.07%	1.4%
763	Watch and jewelry repair	100	\$272,152	\$233,189	\$156,483	5.4%	\$13,763	\$8,506	\$155	0.10%	1.8%
764	Reupholstery & furn. repair	100	\$839,530	\$1,047,917	\$149,960	5.4%	\$56,963	\$8,151	\$123	0.08%	1.5%
769	Misc. repair shops	100	\$9,861,707	\$17,143,114	\$456,359	5.9%	\$1,004,096	\$26,730	\$257	0.06%	1.0%
781	Motion picture production	500	\$4,557,763	\$14,127,803	\$990,868	4.7%	\$665,423	\$46,670	\$316	0.03%	0.7%
782	Motion picture dist.	20	\$287,154	\$1,562,938	\$1,444,490	5.1%	\$80,301	\$74,216	\$237	0.02%	0.3%



**Table VIII-4 Estimated Economic Impact Under Worst-Case Scenarios, of the  
Ergonomics Program Standard on Firms Meeting SBA Size Criteria**

SIC	Industry	SBA size (Number of Employees)*	For all small firms						
			Annualized Compliance Costs for SBA Establishments	Revenues for SBA Firms (\$1,000s)	Average Revenue per Firm (SBA)	Profits as a Percentage of Revenues [c]	Profits for SBA Firms (\$1,000s)	Average Profit per Firm (SBA) (\$)	Average Cost per Firm (SBA) (\$)

Source: Office of Regulatory Analysis.

Revenue data are from U.S. Dept. of Commerce, Bureau of Census. Compliance costs are from Chapter V of this Final Economic Analysis. Profit data are derived from Robert Morris Associates, RMA Annual Statement Studies 1995-1998 (RMA) and U.S. Department of the Treasury, 1995-1997 (IRS). Average profit rates for the period 1995 through 1998 were calculated from a weighted average of profit rates over this period for all 4-digit industries associated with each 3-digit SIC classification. Revenues were used as weights in this calculation.

\* Approximated, to make use of available firm revenue data.

[a] Excludes SIC 3721

[b] Revenue data was wholly or partially suppressed by the Census Bureau for the SBA small entity size category. Any projected economic impacts are therefore overestimated for these industries.

[c] Where estimated costs as a percent of profits would be in excess of 20 percent, revenues and profits are reported as "na", because the high impact is at least partially the direct result of revenue data suppression.

[d] Profit rates, except where noted, are derived from Robert Morris Associates' "RMA Studies."

[e] Profit data not available for all 4-digit industries in this classification; profit rates interpolated from a combination of RMA and IRS profit data.

[f] Based on a combination of RMA and IRS profit data.

[g] Based on IRS profit data.

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	For all very small firms			
						Average Profits per firm (\$)	Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits
074	Veterinary services	\$5,151,445	\$5,804,263	\$272,770	6.1%	\$356,250	\$240	0.09%	1.4%
075	Animal serv., except vet.	\$789,694	\$1,003,467	\$99,383	6.0% [d]	\$60,394	\$78	0.08%	1.3%
078	Landscape & hort. services	\$9,039,804	\$9,790,176	\$150,990	5.9%	\$573,809	\$139	0.09%	1.6%
081	Timber tracts	\$118,388	\$248,523	\$430,716	10.3% [d]	\$25,598	\$147	0.03%	0.3%
083	Forest products	\$18,386	\$55,299	\$650,576	10.3% [d]	\$5,696	\$155	0.02%	0.2%
085	Forestry services	\$228,614	\$320,917	\$316,174	10.3% [d]	\$33,054	\$161	0.05%	0.5%
091	Commercial fishing	\$157,232	\$437,580	\$307,722	5.7% [d]	\$25,130	\$83	0.03%	0.5%
092	Fish hatcheries	\$11,056	\$17,947	\$309,431	6.1% [d]	\$1,101	\$147	0.05%	0.8%
097	Hunting & trapping	\$38,532	\$55,959	\$233,163	6.1% [d]	\$3,433	\$122	0.05%	0.9%
131	Crude petrol. & nat. gas	\$1,054,800	\$10,314,646	\$1,572,834	8.7%	\$892,217	\$151	0.01%	0.1%
132	Natural gas liquids	\$38,456	\$425,191	\$11,189,237	8.7% [d]	\$36,779	\$111	0.00%	0.0%
138	Oil & gas field services	\$1,079,535	\$2,650,444	\$380,756	8.7%	\$229,263	\$147	0.04%	0.4%
201	Meat products	\$271,939	\$1,877,869	\$1,144,344	2.6%	\$47,950	\$163	0.01%	0.6%
202	Dairy products	\$212,096	\$1,265,505	\$1,656,420	3.4%	\$43,497	\$262	0.02%	0.5%
203	Preservd fruits & vegetables	\$161,062	\$1,152,014	\$1,252,189	4.0%	\$45,925	\$162	0.01%	0.3%
204	Grain mill products	\$470,039	\$2,614,381	\$2,389,745	3.3%	\$86,329	\$322	0.01%	0.4%
205	Bakery products	\$466,574	\$933,319	\$443,171	3.7%	\$34,280	\$221	0.05%	1.4%
206	Sugar and confection. prods	\$147,308	\$523,156	\$894,284	3.6%	\$19,012	\$248	0.03%	0.8%
207	Fats and oils	\$59,784	\$513,533	\$3,721,254	3.5% [d]	\$17,786	\$325	0.01%	0.3%
208	Beverages	\$336,064	\$3,572,609	\$2,952,569	4.7% [e]	\$169,318	\$264	0.01%	0.2%
209	Misc. food products	\$600,563	\$2,193,235	\$918,440	3.1% [e]	\$68,647	\$235	0.03%	0.8%
211	Cigarettes	\$1,247	na	na [b]	4.0% [d]	na	\$312	na	na
212	Cigars	\$3,217	na	na [b]	4.0% [d]	na	\$111	na	na
213	Chewing & smoking tobacco	\$1,775	\$12,757	\$1,063,083 [b]	4.0% [d]	\$512	\$197	0.02%	0.5%
214	Tobacco stemm. & redrying	\$596	na	na [b]	4.0% [d]	na	\$119	na	na
221	Brdwn fab. mills, cotton	\$39,174	\$142,493	\$489,667	4.0%	\$5,628	\$143	0.03%	0.7%
222	Broadwoven fabric mills	\$31,755	\$73,125	\$358,456	2.8% [e]	\$2,024	\$160	0.04%	1.6%
223	Brdwn fab. mills, wool	\$6,706	\$35,441	\$770,457	2.8% [e]	\$981	\$156	0.02%	0.7%
224	Narrow fabric mills	\$40,063	\$86,915	\$643,815	3.2%	\$2,760	\$306	0.05%	1.5%
225	Knitting mills	\$181,845	\$685,286	\$728,253	2.9%	\$19,673	\$199	0.03%	1.0%
226	Tex. finishing, except wool	\$83,791	\$332,025	\$639,740	2.8%	\$9,309	\$162	0.03%	0.9%
227	Carpets and rugs	\$46,514	\$243,800	\$820,875	2.8%	\$6,765	\$162	0.02%	0.7%

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	Profits (\$1,000s)	Average Profits per firm (\$)	For all very small firms			
								Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits	Profits
228	Yarn and thread mills	\$31,426	\$128,733	\$825,212	2.0%	\$2,531	\$16,225	\$203	0.02%	0.02%	1.2%
229	Misc. textile goods	\$137,316	\$419,588	\$817,910	2.8% [e]	\$11,819	\$23,040	\$266	0.03%	0.03%	1.2%
231	Men's & boys' suits & coats	\$20,839	\$108,397	\$747,566	0.9% [e]	\$1,003	\$6,915	\$150	0.02%	0.02%	2.2%
232	Men's & boys' furnishings	\$128,664	\$461,072	\$571,341	2.7%	\$72,522	\$15,517	\$173	0.03%	0.03%	1.1%
233	Wm's & misses' outerwear	\$822,777	\$2,792,289	\$440,841	2.6%	\$12,027	\$11,371	\$138	0.03%	0.03%	1.2%
234	Wm's & childrn's undergarment	\$23,362	\$160,401	\$1,055,270	2.4% [e]	\$3,873	\$25,479	\$158	0.01%	0.01%	0.6%
235	Hats, caps, & millinery	\$29,693	\$67,989	\$298,197	3.9%	\$2,669	\$11,704	\$147	0.05%	0.05%	1.3%
236	Girls & childrn's outerwear	\$28,852	\$207,601	\$766,055	2.0%	\$4,099	\$15,126	\$111	0.01%	0.01%	0.7%
237	Fur goods	\$18,676	\$112,866	\$842,284	2.6%	\$2,887	\$21,547	\$146	0.02%	0.02%	0.7%
238	Misc. apparel & accessories	\$97,561	\$245,271	\$376,760	2.6% [e]	\$6,303	\$9,681	\$160	0.04%	0.04%	1.7%
239	Misc. fab. textile prods	\$1,000,283	\$2,731,530	\$373,211	2.6%	\$71,292	\$9,741	\$147	0.04%	0.04%	1.5%
241	Logging	\$1,472,488	\$8,572,706	\$631,460	3.9% [f]	\$334,249	\$24,621	\$108	0.02%	0.02%	0.4%
242	Sawmills & planing mills	\$1,123,461	\$2,523,245	\$632,392	4.3%	\$108,370	\$27,160	\$274	0.04%	0.04%	1.0%
243	Millwork & plywood	\$2,094,230	\$3,501,543	\$493,106	3.6%	\$126,134	\$17,763	\$292	0.06%	0.06%	1.6%
244	Wood containers	\$589,916	\$1,047,315	\$513,390	3.7%	\$38,349	\$18,798	\$284	0.06%	0.06%	1.5%
245	Wood bldings & mobile hom	\$157,439	\$366,648	\$733,296	3.8%	\$13,777	\$27,554	\$296	0.04%	0.04%	1.1%
249	Misc. wood products	\$668,565	\$1,467,850	\$592,114	3.9% [e]	\$56,888	\$22,948	\$260	0.04%	0.04%	1.1%
251	Household furniture	\$836,201	\$1,575,196	\$400,304	3.2%	\$50,401	\$12,809	\$221	0.06%	0.06%	1.7%
252	Office furniture	\$163,358	\$304,623	\$503,509	3.8%	\$11,682	\$19,309	\$274	0.05%	0.05%	1.4%
253	Pub blding & related furn.	\$92,516	\$145,783	\$659,652	4.1%	\$5,941	\$26,881	\$424	0.06%	0.06%	1.6%
254	Partitions and fixtures	\$652,165	\$1,146,102	\$526,943	3.7%	\$42,571	\$19,573	\$314	0.06%	0.06%	1.6%
259	Misc furniture and fixtures	\$220,968	\$552,452	\$562,578	3.2%	\$17,412	\$17,731	\$226	0.04%	0.04%	1.3%
261	Pulp mills	\$2,411	\$23,433	\$1,816,643	4.5%	\$1,145	\$81,766	\$151	0.01%	0.01%	0.2%
262	Paper mills	\$14,733	\$38,880	\$777,600	4.8% [e]	\$1,847	\$36,936	\$268	0.03%	0.03%	0.7%
263	Paperboard mills	\$6,569	\$29,935	\$1,496,750	4.5% [d]	\$1,347	\$67,368	\$299	0.02%	0.02%	0.4%
265	Paperbd containers & boxes	\$319,902	\$807,982	\$1,241,140	4.6%	\$36,928	\$56,725	\$438	0.04%	0.04%	0.8%
267	Misc. cnvrtid paper products	\$483,400	\$1,336,339	\$1,113,616	4.3%	\$57,525	\$47,938	\$376	0.03%	0.03%	0.8%
271	Newspapers	\$1,471,842	\$1,714,050	\$304,179	3.8% [d]	\$65,126	\$11,557	\$236	0.08%	0.08%	2.0%
272	Periodicals	\$658,040	\$3,103,426	\$660,163	3.8%	\$117,930	\$25,086	\$137	0.02%	0.02%	0.5%
273	Books	\$450,631	\$1,681,873	\$614,944	4.5% [e]	\$75,377	\$27,560	\$165	0.03%	0.03%	0.6%
274	Miscellaneous publishing	\$416,297	\$1,526,840	\$609,274	4.5%	\$68,326	\$27,265	\$158	0.03%	0.03%	0.6%
275	Commercial printing	\$6,673,174	\$12,327,939	\$425,718	3.4%	\$424,513	\$14,660	\$233	0.05%	0.05%	1.6%

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	Average Profits per firm (\$1,000s)	For all very small firms			
							Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits	
276	Manifold business forms	\$141,644	\$292,443	\$790,386	3.4%	\$9,797	\$26,478	\$348	0.04%	1.3%
277	Greeting cards	\$20,939	\$53,804	\$632,988	3.8% [d]	\$2,044	\$24,051	\$249	0.04%	1.0%
278	Blankbooks & bookbinding	\$266,869	\$329,528	\$344,334	3.9%	\$12,977	\$13,560	\$285	0.08%	2.1%
279	Printing trade services	\$531,405	\$995,290	\$366,995	3.6% [e]	\$35,638	\$13,141	\$197	0.05%	1.5%
281	Indust. inorganic chemicals	\$177,758	\$594,096	\$2,007,081	4.5% [e]	\$26,705	\$90,219	\$208	0.01%	0.2%
282	Plastics mat. & synthetics	\$64,940	\$609,615	\$2,018,593	4.5%	\$27,406	\$90,749	\$188	0.01%	0.2%
283	Drugs	\$180,906	\$1,440,652	\$1,844,625	4.8%	\$68,957	\$88,293	\$215	0.01%	0.2%
284	Soap, clnrs., & toilet goods	\$326,449	\$2,323,726	\$1,490,523	4.4%	\$102,273	\$65,602	\$200	0.01%	0.3%
285	Paints & allied products	\$183,004	\$1,196,898	\$1,492,392	3.8%	\$44,884	\$55,965	\$201	0.01%	0.4%
286	Indust. organic chemicals	\$89,175	\$738,264	\$2,828,598	4.5%	\$33,130	\$126,933	\$254	0.01%	0.2%
287	Agricultural chemicals	\$125,165	\$1,087,188	\$2,363,452	3.8%	\$41,007	\$89,145	\$205	0.01%	0.2%
289	Misc. chemical products	\$400,674	\$2,355,395	\$2,101,155	4.8% [e]	\$112,039	\$99,945	\$259	0.01%	0.3%
291	Petroleum refining	\$22,693	\$349,271	\$5,213,000	2.9%	\$9,954	\$148,571	\$265	0.01%	0.2%
295	Asphalt paving & roofing mat.	\$338,763	\$1,324,706	\$3,561,038	3.9%	\$51,896	\$139,506	\$318	0.01%	0.2%
299	Misc. pet. & coal prods	\$62,694	\$532,622	\$2,477,312	4.7%	\$25,238	\$117,388	\$227	0.01%	0.2%
301	Tires and inner tubes	\$22,891	\$59,384	\$899,758	4.0% [d]	\$2,390	\$36,213	\$297	0.03%	0.8%
302	Rubber & plastics footwear	\$2,944	\$11,055	\$502,500	4.0% [d]	\$445	\$20,225	\$134	0.03%	0.7%
305	Hose, blng., and gaskets	\$105,698	\$372,073	\$1,045,149	4.0%	\$14,871	\$41,773	\$266	0.03%	0.6%
306	Fab. rubber prod., n.e.c.	\$211,917	\$542,778	\$708,587	4.0%	\$21,846	\$28,519	\$248	0.04%	0.9%
308	Misc plastics, n.e.c.	\$1,486,130	\$5,293,162	\$865,178	4.0%	\$213,152	\$34,840	\$226	0.03%	0.6%
311	Leather tan. & finishing	\$65,806	\$141,491	\$643,141	1.7%	\$2,441	\$11,094	\$294	0.05%	2.6%
313	Footwear cut stock	\$13,506	na	na [b]	2.2% [d]	na	na	\$300	na	na
314	Footwear, except rubber	\$43,109	\$109,113	\$574,279	2.3%	\$2,557	\$13,459	\$232	0.04%	1.7%
315	Leather gloves & mittens	\$13,339	na	na [b]	2.2% [d]	\$0	\$0	\$394	na	na
316	Luggage	\$25,164	\$49,333	\$310,270 [b]	2.9%	\$1,443	\$9,075	\$162	0.05%	1.8%
317	Handbags & prsnal leathr gds.	\$36,710	\$72,877	\$269,915 [b]	2.2% [d]	\$1,601	\$5,929	\$139	0.05%	2.3%
319	Leather goods, n.e.c.	\$76,094	\$105,290	\$326,988	2.2% [f]	\$2,313	\$7,183	\$234	0.07%	3.3%
321	Flat glass	\$9,736	\$12,089	\$318,132	4.9% [d]	\$596	\$15,673	\$256	0.08%	1.6%
322	Glass, pressed or blown	\$114,780	\$185,728	\$470,197	4.9% [f]	\$9,150	\$23,165	\$287	0.06%	1.2%
323	Prod. of purchased glass	\$261,092	\$488,592	\$426,346	5.1%	\$24,674	\$21,530	\$224	0.05%	1.0%
324	Cement, hydraulic	\$31,472	\$125,857	\$1,498,298	4.9% [d]	\$6,201	\$73,816	\$306	0.02%	0.4%
325	Structural clay products	\$79,648	\$130,451	\$550,426	5.4%	\$7,023	\$29,634	\$293	0.05%	1.0%

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues	Profits (\$1,000s)	For all very small firms			
							Average Profits per firm (\$)	Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits
326	Pottery & related prods	\$179,618	\$198,286	\$219,343	4.9% [d]	\$9,769	\$10,806	\$199	0.09%	1.8%
327	Concrete & plast. prdcts	\$2,438,900	\$4,341,440	\$1,046,130	4.8%	\$209,619	\$30,511	\$371	0.04%	0.7%
328	Cut stone & stone prods	\$255,532	\$426,840	\$488,375	5.0%	\$21,449	\$24,541	\$287	0.06%	1.2%
329	Misc. nonmet. mineral prods.	\$263,699	\$648,078	\$859,520	5.0% [c]	\$32,095	\$42,566	\$280	0.03%	0.7%
331	Basic steel products	\$140,857	\$636,677	\$1,329,180	4.3%	\$27,415	\$57,234	\$260	0.02%	0.5%
332	Iron and steel foundries	\$110,493	\$275,374	\$697,149	4.6%	\$12,546	\$31,763	\$266	0.04%	0.8%
333	Primary nonfer. metals	\$21,091	\$155,290	\$1,617,604	4.5% [d]	\$7,016	\$73,078	\$215	0.01%	0.3%
334	Secondary nonfer. metals	\$40,691	\$272,687	\$2,310,907	3.9%	\$10,567	\$89,548	\$302	0.01%	0.3%
335	Nonfer. rolling & drawing	\$89,176	\$369,944	\$1,254,047	4.9%	\$17,988	\$60,976	\$265	0.02%	0.4%
336	Nonfer. foundries (cstngs)	\$250,287	\$545,378	\$637,869	4.9%	\$24,517	\$28,675	\$284	0.04%	1.0%
339	Misc. primary metal prdcts	\$130,568	\$345,464	\$818,635	4.8%	\$16,732	\$39,650	\$266	0.03%	0.7%
341	Met. cans & ship. containers	\$47,709	\$148,512	\$1,207,415	4.1%	\$6,019	\$48,937	\$322	0.03%	0.7%
342	Cutlery, hndls, & hardware	\$389,610	\$866,269	\$612,204	4.6% [e]	\$39,942	\$28,228	\$263	0.04%	0.9%
343	Plumbing & heating fixtures	\$117,467	\$276,437	\$733,255	4.8%	\$13,190	\$34,985	\$298	0.04%	0.9%
344	Fab. struct. metal prdcts	\$2,361,727	\$6,222,867	\$789,403	4.3%	\$266,530	\$33,811	\$286	0.04%	0.8%
345	Screw machine products	\$514,824	\$957,063	\$689,527	4.4%	\$42,321	\$30,490	\$358	0.05%	1.2%
346	Met. forgings & stampings	\$588,066	\$1,402,160	\$866,601	4.6%	\$64,025	\$39,570	\$346	0.04%	0.9%
347	Metal services, n.e.c.	\$1,080,599	\$1,953,183	\$540,898	5.0%	\$96,694	\$26,778	\$289	0.05%	1.1%
348	Ordnance and access., n.e.c.	\$66,988	\$118,616	\$396,709	4.5% [d]	\$5,392	\$18,035	\$223	0.06%	1.2%
349	Misc. fab. metal products	\$1,212,012	\$3,119,176	\$713,770	4.9%	\$152,645	\$34,930	\$267	0.04%	0.8%
351	Engines and turbines	\$51,477	\$136,227	\$846,130	4.0% [d]	\$5,511	\$34,232	\$298	0.04%	0.9%
352	Farm & garden machinery	\$338,138	\$753,582	\$671,642	4.7%	\$35,619	\$31,746	\$292	0.04%	0.9%
353	Construct. & related mach.	\$504,736	\$1,531,656	\$863,878	4.3%	\$66,240	\$37,360	\$270	0.03%	0.7%
354	Metalworking machinery	\$2,336,714	\$4,596,589	\$252,940	4.6%	\$211,014	\$25,384	\$274	0.05%	1.1%
355	Special industry mach.	\$744,270	\$2,252,354	\$781,254	4.1%	\$91,422	\$31,711	\$248	0.03%	0.8%
356	General indust. mach.	\$644,474	\$1,816,610	\$835,223	4.3%	\$78,850	\$36,253	\$275	0.03%	0.8%
357	Computer & office equip.	\$268,787	\$1,479,035	\$1,146,539	3.3%	\$48,696	\$37,749	\$201	0.02%	0.5%
358	Refrig. & serv. indust mach.	\$325,100	\$961,953	\$825,003	3.6%	\$34,573	\$29,651	\$268	0.03%	0.9%
359	Industrial mach., n.e.c.	\$4,939,738	\$8,880,402	\$421,311	5.1% [e]	\$449,154	\$21,309	\$232	0.06%	1.1%
361	Elect. dist. equipment	\$99,387	\$377,070	\$828,725	5.2%	\$19,504	\$42,867	\$209	0.03%	0.5%
362	Elect. indust. apparatus	\$276,486	\$955,829	\$757,993	5.1%	\$49,127	\$38,959	\$211	0.03%	0.5%
363	Household appliances	\$46,400	\$189,966	\$829,546	5.6% [d]	\$10,622	\$46,383	\$198	0.02%	0.4%

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	Profits (\$1,000s)	For all very small firms			
							Average Profits per firm (\$)	Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits
364	Elct. lghing & wire equip.	\$235,582	\$824,155	\$737,829	5.7%	\$47,236	\$42,288	\$205	0.03%	0.5%
365	Household audio & vid. equi	\$91,003	\$573,801	\$1,048,996	5.0%	\$28,864	\$52,768	\$164	0.02%	0.3%
366	Communications equipment	\$194,392	\$1,074,776	\$961,338	5.8% [e]	\$61,851	\$55,323	\$168	0.02%	0.3%
367	Electronic compnnts & access.	\$540,756	\$2,445,955	\$739,183	5.6%	\$136,466	\$41,241	\$160	0.02%	0.4%
369	Misc. elect. equipment	\$188,235	\$659,045	\$745,526	5.9% [e]	\$38,821	\$43,915	\$203	0.03%	0.5%
371	Motor vehicles & equipt.	\$773,827	\$2,145,214	\$820,036	3.5%	\$75,114	\$28,713	\$283	0.03%	1.0%
372	Aircraft and parts	\$223,070	\$629,436	\$715,268	4.7% [e]	\$29,367	\$33,371	\$244	0.03%	0.7%
[a] 373	Ship, boat bldng and repair[	\$575,944	\$983,829	\$377,960	3.6%	\$35,833	\$13,766	\$255	0.07%	1.9%
374	Railroad equipment	\$16,444	\$62,657	\$1,010,597	3.7%	\$2,303	\$37,139	\$211	0.02%	0.6%
375	Motorcycles & bicycles	\$57,195	\$208,190	\$746,201	3.7%	\$7,793	\$27,931	\$204	0.03%	0.7%
376	Guided missiles	\$8,831	\$19,397	\$570,490	3.7%	na	na	\$245	0.04%	na
379	Misc. transportation equip.	\$133,629	\$514,035	\$712,947	3.7% [e]	\$18,799	\$26,073	\$181	0.03%	0.7%
381	Srch & navigation equipment	\$56,912	\$183,208	\$555,176	4.7% [e]	\$8,611	\$26,093	\$164	0.03%	0.6%
382	Meas. & contrllng devices	\$538,189	\$2,196,915	\$789,689	5.6%	\$123,365	\$44,344	\$186	0.02%	0.4%
384	Medical instrmnts & supplies	\$457,710	\$2,382,591	\$861,697	5.3% [e]	\$126,580	\$45,779	\$159	0.02%	0.3%
385	Ophthalmic goods	\$64,238	\$178,836	\$451,606	3.7%	\$6,572	\$16,597	\$153	0.03%	0.9%
386	Photo. equip. & supplies	\$82,559	\$407,370	\$864,904	4.0%	\$16,295	\$34,596	\$169	0.02%	0.5%
387	Watches, clocks, & parts	\$10,190	\$33,895	\$356,789	5.1% [d]	\$1,715	\$18,057	\$102	0.03%	0.6%
391	Jwlry, slvrwre, and plate	\$290,301	\$1,468,531	\$597,693	3.3%	\$48,894	\$19,900	\$121	0.02%	0.6%
393	Musical instruments	\$67,895	\$134,020	\$293,260	3.7% [d]	\$5,098	\$11,156	\$153	0.05%	1.4%
394	Toys and sporting goods	\$452,655	\$1,300,869	\$480,380	3.8% [d]	\$47,607	\$17,580	\$169	0.04%	1.0%
395	Office and art supplies	\$126,919	\$358,110	\$456,773	3.8% [d]	\$13,623	\$17,377	\$160	0.04%	0.9%
396	Costume jewelery & notions	\$94,481	\$379,044	\$418,833	3.8% [d]	\$14,420	\$15,933	\$108	0.03%	0.7%
399	Misc. manufactures	\$1,109,935	\$3,120,612	\$438,288	4.1%	\$127,009	\$17,838	\$157	0.04%	0.9%
411	Local & suburban trans.	\$2,426,421	\$1,468,804	\$221,372	4.4%	\$64,611	\$9,738	\$335	0.15%	3.4%
412	Taxis	\$323,349	\$504,966	\$167,651	4.5% [d]	\$22,763	\$7,557	\$108	0.06%	1.4%
413	Intercity & rural bus trans.	\$94,298	\$74,381	\$371,905	5.4%	\$3,998	\$19,990	\$309	0.08%	1.5%
414	Bus charter service	\$244,373	\$323,685	\$348,048	4.6%	\$14,876	\$15,995	\$246	0.07%	1.5%
415	School buses	\$479,939	\$363,700	\$155,627	4.6%	\$16,548	\$7,081	\$187	0.12%	2.6%
417	Bus terminals	\$17,483	\$9,269	\$193,104	4.5% [d]	\$418	\$8,705	\$336	0.17%	3.9%
421	Trking & Courier Service	\$20,687,131	\$37,505,480	\$401,463	3.4%	\$1,289,664	\$13,805	\$205	0.05%	1.5%
422	Pub. warehousing & storage	\$3,678,086	\$3,179,502	\$414,754	10.7%	\$338,904	\$44,209	\$359	0.09%	0.8%



**For all very small firms**

SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	Profits (\$1,000s)	Average Profits per firm (\$)	Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits
423	Trucking terminal fac.	\$23,495	\$10,378	\$172,967	[b]	\$406	\$6,769	\$331	0.19%	4.9%
430	U.S. Postal Service	na	na	na	na	na	na	na	na	na
451	Air trans., scheduled	\$2,442,252	\$1,380,678	\$1,100,142	3.6%	\$49,121	\$39,140	\$606	0.06%	1.5%
452	Air trans., nonsched.	\$239,708	\$957,365	\$725,277	5.3%	\$50,740	\$38,440	\$155	0.02%	0.4%
458	Airports and services	\$709,169	\$1,185,610	\$828,482	3.8%	\$428,482	\$16,389	\$225	0.05%	1.4%
461	Pipelines, except natural gas	\$411,829	\$291,113	\$8,821,606	6.5% [d]	\$19,061	\$577,617	\$531	0.01%	0.1%
472	Pass. trans. arrangements	\$2,159,216	\$5,196,650	\$202,173	2.4%	\$126,169	\$4,909	\$70	0.03%	1.4%
473	Freight trans. arrangements	\$3,426,174	\$4,928,082	\$455,124	3.9%	\$189,731	\$17,522	\$265	0.06%	1.5%
474	Rental of railroad cars	\$14,353	\$227,179	\$3,112,041	3.4% [d]	\$7,704	\$105,530	\$145	0.00%	0.1%
478	Misc. trans. services	\$735,923	\$531,429	\$299,228	5.4%	\$28,772	\$16,200	\$347	0.12%	2.1%
481	Telephone communication	\$2,028,328	\$4,811,628	\$857,841	5.9%	\$285,528	\$50,905	\$102	0.01%	0.2%
482	Telegraph & other comm.	\$28,505	\$341,300	\$937,637	5.6% [f]	\$19,042	\$52,312	\$72	0.01%	0.1%
483	Radio & TV broadcasting	\$466,711	\$1,840,020	\$338,053	6.6%	\$121,494	\$22,321	\$80	0.02%	0.3%
484	Cable & other pay TV service	\$367,547	\$2,117,829	\$1,249,457	2.7%	\$57,711	\$34,048	\$118	0.01%	0.4%
489	Communication serv., n.e.c.	\$55,553	\$948,974	\$781,049	6.1%	\$57,887	\$47,644	\$44	0.01%	0.1%
491	Electric services	\$528,214	\$1,430,379	\$2,639,076	12.5%	\$178,321	\$329,005	\$163	0.01%	0.0%
492	Gas product. & distribution	\$484,595	\$3,377,499	\$6,313,082	7.9%	\$266,183	\$497,538	\$185	0.00%	0.0%
493	Comb. utility services	\$110,701	\$306,134	\$1,749,337	10.4% [d]	\$31,761	\$181,489	\$127	0.01%	0.1%
494	Water supply	\$374,055	\$1,039,660	\$313,245	12.2%	\$172,098	\$38,294	\$107	0.03%	0.3%
495	Sanitary services	\$839,808	\$2,451,869	\$582,253	6.2%	\$153,232	\$36,389	\$167	0.03%	0.5%
496	Steam & air-cond. supplies	\$6,120	\$50,218	\$1,394,944	10.4% [d]	\$5,210	\$144,722	\$125	0.01%	0.1%
497	Irrigation systems	\$26,389	\$71,818	\$207,566	10.4% [d]	\$7,451	\$21,534	\$74	0.04%	0.3%
501	Motor vehicles	\$11,025,830	\$57,725,483	\$1,992,802	2.2%	\$1,264,150	\$43,641	\$284	0.01%	0.7%
502	Furn. & homefurnishings	\$3,688,917	\$25,565,841	\$1,970,696	2.3%	\$583,962	\$45,014	\$257	0.01%	0.6%
503	Lumber & construct. mat.	\$8,018,718	\$36,044,519	\$2,340,857	2.3%	\$829,644	\$53,880	\$405	0.02%	0.8%
504	Prof. & commercial equip.	\$9,245,141	\$58,977,265	\$1,604,780	2.7%	\$1,610,147	\$43,812	\$212	0.01%	0.5%
505	Met. & minerals, except pet.	\$2,948,811	\$49,134,340	\$6,790,263	2.6%	\$1,269,268	\$175,410	\$321	0.00%	0.2%
506	Electrical goods	\$7,589,494	\$88,314,579	\$3,500,935	2.5%	\$2,214,586	\$87,790	\$219	0.01%	0.2%
507	Hardware supplies	\$8,197,408	\$32,741,423	\$2,052,239	2.5%	\$823,457	\$51,614	\$366	0.02%	0.7%
508	Mach., equip., & supplies	\$20,206,586	\$101,937,718	\$1,946,454	2.9%	\$2,940,703	\$56,151	\$309	0.02%	0.5%
509	Misc. durable goods	\$6,717,152	\$64,760,858	\$1,894,867	3.0% [e]	\$1,925,322	\$56,334	\$187	0.01%	0.3%
511	Paper and paper products	\$2,572,080	\$32,127,109	\$2,773,883	1.9%	\$620,631	\$53,586	\$176	0.01%	0.3%

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

For all very small firms										
SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	Profits (\$1,000s)	Average Profits per firm (\$)	Annualized	Annualized	
								Costs per Firm	Costs as a Percent of Revenues	
512	Drugs, propriet., & sundries	\$1,342,622	\$11,908,099	\$2,473,125	3.6% [e]	\$425,715	\$88,414	\$231	0.01%	0.3%
513	Apparel and notions	\$3,399,139	\$44,192,876	\$2,456,798	2.5%	\$1,095,284	\$60,890	\$176	0.01%	0.3%
514	Groceries & related products	\$10,050,562	\$106,043,754	\$3,526,680	1.8%	\$1,874,721	\$62,347	\$296	0.01%	0.5%
515	Farm-prod. raw materials	\$1,474,524	\$41,823,552	\$6,961,310	28.3%	\$11,847,252	\$1,971,913	\$166	0.00%	0.0%
516	Chemicals & allied prods	\$3,114,523	\$37,105,160	\$3,958,306	3.1%	\$1,144,128	\$122,053	\$240	0.01%	0.2%
517	Petrol. & petrol. prods	\$2,978,006	\$65,994,760	\$10,268,362	1.3%	\$841,994	\$131,009	\$275	0.00%	0.2%
518	Beer, wine, & dist. bev.	\$1,430,477	\$8,974,820	\$3,642,378	3.5%	\$315,565	\$128,070	\$464	0.01%	0.4%
519	Misc. nondurable goods	\$9,161,482	\$60,033,260	\$1,484,686	2.3%	\$1,387,176	\$34,306	\$188	0.01%	0.5%
521	Lumber & other blding mat.	\$7,775,768	\$15,866,247	\$1,091,965	2.3%	\$364,924	\$25,115	\$419	0.04%	1.7%
523	Paint, glass, wallpaper str	\$2,732,262	\$3,282,009	\$610,493	2.3%	\$73,845	\$13,736	\$295	0.05%	2.2%
525	Hardware stores	\$3,167,507	\$5,911,976	\$523,415	2.2%	\$127,107	\$11,253	\$249	0.05%	2.2%
526	Retail nurseries and gardens	\$2,876,208	\$4,981,655	\$528,614	2.5% [e]	\$122,051	\$12,951	\$279	0.05%	2.2%
527	Mobile home dealers	\$2,106,161	\$5,612,243	\$1,694,518	3.2%	\$180,995	\$54,648	\$492	0.03%	0.9%
531	Department stores	\$17,504	\$140,547	\$1,171,225	2.8%	\$3,935	\$32,794	\$52	0.00%	0.2%
533	Variety stores	\$3,699,518	\$1,203,688	\$330,502	3.1%	\$37,314	\$10,246	\$386	0.12%	3.8%
539	Misc. gen. merchandise str.	\$2,060,676	\$3,202,753	\$486,889	2.2%	\$70,461	\$10,712	\$186	0.04%	1.7%
541	Grocery stores	\$13,891,309	\$43,671,398	\$571,428	1.4%	\$589,564	\$7,714	\$203	0.04%	2.6%
542	Meat and fish markets	\$1,348,495	\$3,818,531	\$540,486	2.5%	\$95,463	\$13,512	\$183	0.03%	1.4%
543	Fruit & vegetable markets	\$358,992	\$1,414,504	\$472,288	1.4% [d]	\$19,955	\$6,663	\$116	0.02%	1.7%
544	Candy, nut, & confctry str	\$698,582	\$672,831	\$241,504	4.1%	\$27,418	\$9,841	\$159	0.07%	1.6%
545	Dairy products stores	\$321,747	\$430,018	\$290,749	1.4% [d]	\$6,067	\$4,102	\$133	0.05%	3.2%
546	Retail bakeries	\$3,337,520	\$3,235,280	\$212,903	3.2%	\$103,529	\$6,813	\$183	0.09%	2.7%
549	Misc. food stores	\$2,613,544	\$370,138	\$370,138	2.4%	\$62,072	\$8,791	\$129	0.03%	1.5%
551	New and used car dealers	\$3,430,605	\$29,272,772	\$3,563,332	1.2% [e]	\$358,591	\$43,651	\$393	0.01%	0.9%
552	Used car dealers	\$1,456,428	\$19,626,194	\$936,141	2.5%	\$480,842	\$22,935	\$68	0.01%	0.3%
553	Auto & home supply stores	\$13,501,547	\$14,670,042	\$570,286	2.3%	\$333,743	\$12,974	\$340	0.06%	2.6%
554	Gas service stations	\$17,552,017	\$65,121,661	\$1,271,312	1.6%	\$1,041,947	\$20,341	\$198	0.02%	1.0%
555	Boat dealers	\$1,485,453	\$4,874,107	\$1,125,660	2.0%	\$95,045	\$21,950	\$315	0.03%	1.4%
556	Rec. vehicle dealers	\$1,009,049	\$3,776,117	\$1,564,906	2.1%	\$77,410	\$32,081	\$394	0.03%	1.2%
557	Motorcycle dealers	\$313,036	\$4,274,776	\$1,271,498	2.8%	\$119,694	\$35,602	\$91	0.01%	0.3%
559	Auto dealers, n.e.c.	\$88,967	\$917,486	\$786,192	2.6% [e]	\$23,855	\$20,441	\$75	0.01%	0.4%
561	Men's & boys' clothing str	\$1,500,392	\$3,208,794	\$552,003	1.4%	\$44,121	\$7,590	\$120	0.02%	1.6%

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

For all very small firms										
SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	Profits (\$1,000s)	Average Profits per firm (\$)	Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits
562	Women's clothing stores	\$4,326,533	\$5,967,076	\$375,642	1.1%	\$65,638	\$4,132	\$119	0.03%	2.9%
563	Wm's access & specialty str	\$835,970	\$1,265,901	\$327,784	1.8% [d]	\$23,377	\$6,053	\$104	0.03%	1.7%
564	Childrn's & infants' wear str	\$569,139	\$893,055	\$303,244	1.8% [d]	\$16,492	\$5,600	\$129	0.04%	2.3%
565	Family clothing stores	\$3,263,269	\$3,250,394	\$483,690	2.2%	\$69,883	\$10,399	\$231	0.05%	2.2%
566	Shoe stores	\$4,593,305	\$3,657,301	\$519,872	2.4%	\$88,690	\$12,607	\$165	0.03%	1.3%
569	Misc. apparel stores	\$705,055	\$2,400,039	\$332,139	2.0%	\$48,001	\$6,643	\$75	0.02%	1.1%
571	Furniture & homefurnishing str	\$18,078,465	\$28,487,276	\$601,937	2.4%	\$696,648	\$14,720	\$303	0.05%	2.1%
572	Household appliance str	\$2,556,580	\$5,306,112	\$625,647	2.2%	\$118,061	\$13,921	\$278	0.04%	2.0%
573	Radio, TV, & compr str	\$6,065,913	\$16,573,752	\$720,128	2.1%	\$351,306	\$15,264	\$172	0.02%	1.1%
581	Eating & drinking places	\$46,841,266	\$62,342,602	\$213,216	3.0%	\$1,869,288	\$6,393	\$138	0.06%	2.2%
591	Drug stores	\$7,198,992	\$20,363,293	\$945,196	2.2%	\$442,902	\$20,558	\$222	0.02%	1.1%
592	Liquor stores	\$1,530,053	\$14,915,701	\$599,337	1.6%	\$234,922	\$9,440	\$55	0.01%	0.6%
593	Used merchandise stores	\$3,247,956	\$4,225,407	\$228,524	4.8%	\$203,876	\$11,026	\$145	0.06%	1.3%
594	Misc. shopping goods str.	\$18,553,068	\$32,665,888	\$370,009	2.6%	\$862,380	\$9,768	\$156	0.04%	1.6%
596	Nonstore retailers	\$5,519,292	\$12,225,645	\$506,805	2.5%	\$304,134	\$12,608	\$207	0.04%	1.6%
598	Fuel dealers	\$3,034,140	\$6,904,540	\$1,030,682	1.8%	\$126,751	\$18,921	\$295	0.03%	1.6%
599	Retail stores, n.e.c.	\$9,772,210	\$23,268,601	\$314,785	3.2%	\$750,317	\$10,151	\$109	0.03%	1.1%
601	Central res. depository	\$7,237	\$126,998	\$10,583,167	10.8% [d]	\$13,716	\$1,142,982	\$233	0.00%	0.0%
602	Commercial banks	\$7,249,911	\$6,215,272	\$2,296,000	10.8% [d]	\$671,249	\$247,968	\$153	0.01%	0.1%
603	Savings institutions	\$1,698,251	\$2,075,332	\$3,336,547	10.8% [d]	\$224,136	\$360,347	\$156	0.00%	0.0%
606	Credit unions	\$1,290,647	\$6,290,272	\$755,044	10.8% [d]	\$679,349	\$81,545	\$105	0.01%	0.1%
608	Foreign banking	\$39,639	\$1,241,706	\$12,173,588	10.8% [d]	\$134,104	\$1,314,748	\$127	0.00%	0.0%
609	Banking-related functions	\$513,323	\$1,368,201	\$459,282	10.8% [d]	\$147,766	\$49,602	\$101	0.02%	0.2%
611	Federal credit agencies	\$108,937	\$127,485	\$1,722,770	10.8%	\$13,768	\$186,059	\$97	0.01%	0.1%
614	Personal cred. institutions	\$1,428,038	\$3,486,159	\$856,550	15.5% [d]	\$539,193	\$132,480	\$83	0.01%	0.1%
615	Business cred. institutions	\$460,695	\$4,947,066	\$1,814,771	17.1% [d]	\$844,648	\$309,849	\$101	0.01%	0.0%
616	Mortgage bankers & brokers	\$1,886,455	\$5,061,228	\$397,146	11.7%	\$589,838	\$46,284	\$96	0.02%	0.2%
621	Security brokers & dealers	\$1,987,067	\$6,612,505	\$842,572	12.8%	\$844,196	\$107,568	\$95	0.01%	0.1%
622	Commodity contracts brokers	\$91,769	\$881,352	\$640,983	13.3%	\$117,356	\$85,350	\$62	0.01%	0.1%
623	Security & commod. exchan	\$8,867	\$32,734	\$345,567	13.3%	\$4,359	\$71,549	\$100	0.02%	0.1%
628	Security & commod. services	\$1,380,144	\$7,492,941	\$466,966	15.3% [d]	\$1,148,077	\$71,549	\$81	0.02%	0.1%
631	Life insurance	\$1,184,923	\$2,777,904	\$3,346,872	6.8% [d]	\$189,546	\$228,369	\$156	0.00%	0.1%

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	For all very small firms			
						Average Profits per firm (\$)	Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits
632	Medical & health insur.	\$290,570	\$2,824,245	\$4,637,512	3.6%	\$101,867	\$142	0.00%	0.1%
633	Fire, marine, & caslty ins.	\$1,746,618	\$2,862,923	\$1,879,792	9.1% [d]	\$259,095	\$104	0.01%	0.1%
635	Surety insurance	\$54,423	\$425,650	\$2,086,520	6.8%	\$29,044	\$113	0.01%	0.1%
636	Title insurance	\$275,458	\$212,137	\$380,856	4.6%	\$9,652	\$134	0.04%	0.8%
637	Pension and health funds	\$238,320	\$849,385	\$391,602	6.8% [f]	\$57,956	\$101	0.03%	0.4%
639	Ins. carriers, n.e.c.	\$26,373	\$175,292	\$872,100	6.8%	\$11,961	\$112	0.01%	0.2%
641	Insurance agents	\$9,653,557	\$31,072,071	\$276,764	6.8% [d]	\$2,120,669	\$80	0.03%	0.4%
651	Real estate operators	\$9,851,875	\$51,322,198	\$563,015	14.1% [d]	\$7,221,217	\$103	0.02%	0.1%
653	RE agents and managers	\$10,082,095	\$37,861,382	\$351,790	13.2%	\$5,007,168	\$86	0.02%	0.2%
654	Title abstract offices	\$435,298	\$1,252,913	\$306,711	13.3% [e]	\$166,756	\$92	0.03%	0.2%
655	Subdividers & developrs	\$1,783,492	\$7,676,583	\$465,756	10.6%	\$814,400	\$103	0.02%	0.2%
671	Holding offices	\$848,720	\$5,148,112	\$983,215	25.4%	\$1,306,839	\$103	0.01%	0.0%
672	Investment offices	\$66,206	\$1,718,384	\$2,504,933	20.4%	\$351,041	\$79	0.00%	0.0%
673	Trusts	\$690,137	\$5,079,834	\$640,746	24.3%	\$1,234,273	\$84	0.01%	0.1%
679	Miscellaneous investing	\$682,275	\$9,524,886	\$1,309,443	21.5%	\$2,051,829	\$87	0.01%	0.0%
701	Hotels and motels	\$6,349,696	\$8,638,183	\$294,537	7.0%	\$600,354	\$196	0.07%	1.0%
702	Rooming & boarding houses	\$93,722	\$259,463	\$176,505	7.0%	\$18,060	\$61	0.03%	0.5%
703	Camps and rec. vehicle parks	\$245,366	\$1,690,717	\$263,845	7.3%	\$124,022	\$35	0.01%	0.2%
704	Membership-basis org. hotels	\$140,908	\$435,978	\$193,338	7.0% [d]	\$30,346	\$60	0.03%	0.4%
721	Laundry & garment services	\$10,379,942	\$7,783,309	\$166,584	5.9%	\$461,638	\$203	0.12%	2.1%
722	Photo studios, portrait	\$944,924	\$1,699,071	\$202,656	4.5% [d]	\$76,458	\$9,120	0.04%	0.8%
723	Beauty shops	\$4,574,096	\$7,617,832	\$107,510	4.4%	\$335,185	\$58	0.05%	1.2%
724	Barber shops	\$544,847	\$350,653	\$83,509	5.9%	\$20,531	\$124	0.15%	2.5%
725	Shoe repair	\$231,171	\$209,963	\$102,873	5.9%	\$12,293	\$110	0.11%	1.8%
726	Fun. service and crematories	\$2,043,782	\$5,734,274	\$501,686	7.6% [d]	\$432,938	\$149	0.03%	0.4%
729	Misc personal services.	\$1,514,670	\$3,452,437	\$139,088	6.6% [d]	\$226,625	\$53	0.04%	0.6%
731	Advertising	\$1,997,716	\$8,139,343	\$498,612	3.9%	\$317,695	\$115	0.02%	0.6%
732	Credit report.& collection	\$739,933	\$1,765,296	\$358,290	5.4%	\$95,898	\$133	0.04%	0.7%
733	Mailing, reprod, steno., serv	\$3,471,741	\$10,979,283	\$348,261	4.7%	\$518,035	\$109	0.03%	0.7%
734	Services to buildings	\$5,573,882	\$8,217,682	\$143,440	3.5%	\$289,477	\$96	0.07%	1.9%
735	Misc. equipmt. rental	\$3,752,236	\$8,260,418	\$557,534	8.8%	\$730,600	\$174	0.03%	0.4%
736	Pers. supply services	\$1,952,808	\$6,448,228	\$373,810	3.3%	\$210,360	\$96	0.03%	0.8%

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

For all very small firms										
SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	Profits (\$1,000s)	Average Profits per firm (\$)	Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits
737	Compr & data proc. services	\$7,872,892	\$28,733,221	\$406,336	4.9%	\$1,419,238	\$20,070	\$102	0.02%	0.5%
738	Misc. business services	\$5,854,472	\$21,125,209	\$299,780	5.1%	\$1,071,552	\$15,206	\$79	0.03%	0.5%
751	Auto rentals, no drivers	\$1,643,649	\$3,370,860	\$689,902	5.4%	\$183,669	\$37,591	\$181	0.03%	0.5%
752	Automobile parking	\$814,540	\$743,553	\$415,393	4.4%	\$32,663	\$18,248	\$115	0.03%	0.6%
753	Automotive repair shops	\$23,317,965	\$39,577,660	\$305,907	3.9%	\$1,527,706	\$11,808	\$172	0.06%	1.5%
754	Automotive serv., exc repair	\$5,311,540	\$4,591,217	\$221,295	4.4% [d]	\$203,735	\$9,820	\$222	0.10%	2.3%
762	Electrical repair shops	\$3,197,976	\$4,493,450	\$275,689	4.6%	\$208,316	\$12,781	\$181	0.07%	1.4%
763	Watch and jewelry repair	\$245,584	\$253,189	\$158,739	5.4%	\$13,763	\$8,629	\$141	0.09%	1.6%
764	Reupholstery & furn. repair	\$791,667	\$1,047,917	\$152,026	5.4%	\$56,963	\$8,264	\$117	0.08%	1.4%
769	Misc. repair shops	\$7,060,400	\$11,475,584	\$322,574	5.9% [d]	\$672,141	\$18,894	\$194	0.06%	1.0%
781	Motion picture production	\$2,358,579	\$7,573,063	\$563,766	4.7% [d]	\$356,693	\$26,554	\$173	0.03%	0.7%
782	Motion picture dist.	\$300,860	\$1,562,938	\$1,444,490	5.1%	\$80,301	\$74,216	\$248	0.02%	0.3%
783	Motion picture theaters	\$1,814,001	\$766,131	\$363,958	6.3%	\$47,941	\$22,775	\$446	0.12%	2.0%
784	Video tape rental	\$5,151,272	\$2,635,735	\$194,347	5.9% [d]	\$154,849	\$11,418	\$267	0.14%	2.3%
791	Dance studios & schools	\$370,510	\$690,662	\$124,064	4.3%	\$29,561	\$5,310	\$67	0.05%	1.3%
792	Producers, orch., entertainers	\$1,442,180	\$8,565,302	\$554,963	4.6%	\$395,214	\$25,607	\$94	0.02%	0.4%
793	Bowling centers	\$678,524	\$968,675	\$256,399	3.8% [d]	\$36,325	\$9,615	\$173	0.07%	1.8%
794	Commercial sports	\$686,037	\$2,164,149	\$531,863	3.5%	\$74,663	\$18,349	\$168	0.03%	0.9%
799	Misc. recreation services	\$7,054,099	\$13,195,422	\$267,960	4.4%	\$586,841	\$11,917	\$139	0.05%	1.2%
801	Offices of medical doctors	\$25,687,876	\$87,978,993	\$555,426	6.4%	\$5,608,661	\$35,408	\$152	0.03%	0.4%
802	Dentists offices and clinics	\$17,853,940	\$41,066,668	\$377,305	10.5%	\$4,291,467	\$39,428	\$163	0.04%	0.4%
803	Osteopathic physicians	\$841,355	\$3,467,034	\$409,041	13.4% [e]	\$463,716	\$54,709	\$97	0.02%	0.2%
804	Other health practitioners	\$11,304,197	\$19,394,348	\$243,651	7.4%	\$1,430,918	\$17,977	\$139	0.06%	0.8%
805	Nursing & personal care fac.	\$2,209,335	\$1,432,002	\$306,376	4.7%	\$67,849	\$14,516	\$282	0.09%	1.9%
806	Hospitals	\$96,197	\$504,465	\$2,084,566	5.5%	\$27,724	\$114,563	\$227	0.01%	0.2%
807	Med. & dental labs	\$1,994,137	\$3,958,716	\$345,046	7.2%	\$284,284	\$24,779	\$148	0.04%	0.6%
808	Home hlth care services	\$1,886,069	\$1,879,363	\$328,675	3.2%	\$59,670	\$10,435	\$229	0.07%	2.2%
809	Hlth & allied serv., n.e.c.	\$3,348,743	\$3,836,596	\$401,402	6.7%	\$257,189	\$26,908	\$211	0.05%	0.8%
811	Legal services	\$14,936,859	\$2,803,005	\$338,722	17.5%	\$9,240,526	\$59,276	\$94	0.03%	0.2%
821	Elem. & secondary schools	\$1,836,323	\$2,453,454	\$335,676	5.9% [e]	\$144,140	\$19,721	\$197	0.06%	1.0%
822	Colleges & universities	\$240,626	\$427,806	\$422,316	9.1%	\$39,093	\$38,592	\$176	0.04%	0.5%
823	Libraries	\$197,636	\$234,869	\$124,138	8.1%	\$19,122	\$10,107	\$100	0.08%	1.0%

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

For all very small firms										
SIC	Industry	Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	Profits (\$1,000s)	Average Profits per firm (\$)	Annualized Costs per Firm	Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits
824	Vocational schools	\$566,465	\$1,465,565	\$274,348	6.3%	\$92,511	\$17,318	\$98	0.04%	0.6%
829	Schools, n.e.c.	\$1,280,060	\$3,234,624	\$240,887	5.5% [d]	\$176,287	\$13,128	\$92	0.04%	0.7%
832	Individual & fam. services	\$5,237,355	\$5,119,204	\$183,873	4.5%	\$229,084	\$8,228	\$147	0.08%	1.8%
833	Job train. & related serv.	\$756,472	\$915,449	\$272,050	3.4%	\$31,125	\$9,250	\$131	0.05%	1.4%
835	Child day care services	\$5,381,390	\$4,474,833	\$112,016	4.7%	\$208,080	\$5,209	\$119	0.11%	2.3%
836	Residential care	\$4,793,905	\$2,154,658	\$169,618	3.4%	\$73,797	\$5,809	\$218	0.13%	3.8%
839	Social services, n.e.c.	\$1,419,875	\$4,717,297	\$468,265	5.3%	\$250,017	\$24,818	\$108	0.02%	0.4%
841	Museums & art galleries	\$441,602	\$721,567	\$197,203	21.5%	\$154,776	\$42,300	\$114	0.06%	0.3%
842	Bot. & zoolog. gardens	\$60,366	\$108,760	\$268,543	21.5%	\$23,329	\$57,603	\$133	0.05%	0.2%
861	Business associations	\$1,470,347	\$5,475,973	\$386,667	3.9%	\$215,388	\$15,209	\$100	0.03%	0.7%
862	Prof. organizations	\$570,382	\$2,590,876	\$415,871	4.9% [d]	\$126,953	\$20,378	\$89	0.02%	0.4%
863	Labor organizations	\$1,483,375	\$5,137,494	\$297,412	8.6%	\$441,824	\$25,577	\$83	0.03%	0.3%
864	Civic & social assoc.	\$3,593,256	\$6,936,547	\$218,860	4.3%	\$294,803	\$9,302	\$109	0.05%	1.2%
865	Political organizations	\$220,666	\$697,077	\$280,740	7.2%	\$50,270	\$20,246	\$89	0.03%	0.4%
866	Religious organizations	\$11,957,336	\$26,408,707	\$183,752	8.9%	\$2,343,773	\$16,308	\$83	0.05%	0.5%
869	Membership orgs., n.e.c.	\$941,229	\$1,856,411	\$276,540	8.5% [d]	\$157,795	\$23,506	\$119	0.04%	0.5%
871	Eng. and arch. services	\$8,996,897	\$24,141,771	\$372,754	4.6%	\$1,114,119	\$17,202	\$130	0.03%	0.8%
872	Accountg. auditing, & bkeepin	\$9,226,542	\$18,007,357	\$231,427	12.0%	\$2,151,879	\$27,656	\$116	0.05%	0.4%
873	Research & testing services	\$2,719,289	\$6,238,312	\$485,207	4.9%	\$306,972	\$23,876	\$177	0.04%	0.7%
874	Management & pub. relation	\$8,615,971	\$29,651,372	\$360,411	6.3%	\$1,855,190	\$22,550	\$99	0.03%	0.4%
899	Services, n.e.c.	\$2,179,090	\$4,867,692	\$322,791	6.8%	\$331,003	\$21,950	\$136	0.04%	0.6%
Total		\$790,733,223	\$2,493,192,901			\$127,230,790				
Average (weighted)		\$11,989,094	\$30,050,583	\$588,144	5.9%	1,784,293	30,014	155	0.04%	1.0%

Source: Office of Regulatory Analysis.

Revenue data are from U.S. Dept. of Commerce, Bureau of Census. Compliance costs are from Chapter V of this Final Economic Analysis. Profit data are derived from Robert Morris Associates, RMA Annual Statement Studies 1995-1998 (RMA) and U.S. Department of the Treasury, 1995-1997 (IRS). Average profit rates for the period 1995 through 1998 were calculated from a weighted average of profit rates over this period for all 4-digit industries associated with each 3-digit SIC classification. Revenues were used as weights in this calculation.

**Table VIII-5 Estimated Economic Impact of the Ergonomics Program Standard on All Very Small Firms \***

SIC	Industry	For all very small firms					
		Annualized Compliance Costs for All Very Small Establishments	Revenues for Very Small Firms (\$1,000s)	Average Revenues for Very Small Firms (\$)	Profits as a Percentage of Revenues [c]	Profits (\$1,000s)	Average Profits per firm (\$)
						Annualized Costs as a Percent of Revenues	Annualized Costs as a Percent of Profits

\* "Very small firm" refers to firms with 1-19 employees.

[a] Excludes SIC 3731 (not in the scope of proposed standard)

[b] Revenue data was wholly or partially suppressed by the Census Bureau for the 1-19 employee entity size category. Any projected economic impacts are therefore overestimated for these industries.

[c] Where estimated costs as a percent of profits would be in excess of 20 percent, revenues and profits are reported as "na", because the high impact is at least partially the direct result of revenue data suppression rates, except where noted, are derived from Robert Morris Associates' "RMA Studies."

[d] Profit data not available for all 4-digit industries in this classification; profit rates interpolated from a combination of RMA and IRS profit data.

[e] Based on a combination of RMA and IRS profit data.

[f] Based on IRS profit data.

### H. Summary of the Final Regulatory Flexibility Analysis

The Regulatory Flexibility Act, as amended in 1996, requires that a Final Regulatory Flexibility Analysis (FRFA) contain the following elements:<sup>3</sup>

(1) a succinct statement of the need for, and objectives of, the rule;

(2) a summary of significant issues raised by public comments on the Initial Regulatory Flexibility Analysis (IRFA), a summary of the assessment of the Agency of the issues, and a statement of any changes made in the proposal as a result of the comments;

(3) a description and estimate of the number of small entities affected by the final standard, where possible;

(4) a description of the reporting, recordkeeping, and other compliance requirements of the rule, including an estimate of the classes of small entities which will be subject to the requirements, and the type of professional skills necessary for the preparation of the report or record; and

(5) a description of the steps the Agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of the applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the Agency which affect the impact of the small entities was rejected.

In addition, a Final Regulatory Flexibility Analysis must contain a description of any significant alternatives to the proposed rule that accomplish the stated objectives of the applicable statute (in this case the OSH Act) and that minimize any significant economic impact of the proposed rule on small entities. This section summarizes OSHA's Final Regulatory Flexibility Analysis. The full analysis, including responses to comments on the IRFA and a discussion of alternatives, is provided as part of the Final Economic and Regulatory Flexibility Analysis, which is Ex. 900 in the Docket.

1. *Description of the Reasons for Agency Action.* OSHA is issuing a final Ergonomics Program Standard to address the significant risk of employee exposure to ergonomic risk factors in general industry workplaces. Exposure

to ergonomic risk factors on the job leads to MSDs of the upper extremities, back, and lower extremities. Every year, nearly 600,000 MSDs that are serious enough to cause time off work are reported to the Bureau of Labor Statistics by employers, and evidence suggests that an even larger number of non-lost worktime MSDs occur every year. The purpose of this standard is to reduce the number and severity of MSDs caused by exposure to risk factors in the workplace.

2. *Significant issues raised by public comments on the Initial Regulatory Flexibility Analysis (IRFA), an assessment of the issues, and changes made in the proposal as a result of the comments.* Relatively few commenters provided comment on the Initial Regulatory Flexibility Analysis. However commenters did raise many issues relevant to the regulatory flexibility analysis. Some of the principal issues raised by public comments that have special relevance to regulatory flexibility analysis, and OSHA's responses to them, are summarized in the remainder of this section.

Many commenters referred to an estimate attributed to SBA that the costs of complying with the proposal would be 2.5 to 15 times higher than the Agency's estimate (see, e.g., Tr. pp. 7767-7768, pp. 5730-5731, pp. 16005-16006, p. 9975, pp. 15668-15669, 30-2047, 30-3811, 30-2056, 30-238, 31-326, 31-326, 30-2058). While OSHA does not agree with that estimate, OSHA has revised the rule in a variety of ways to make it less costly to small businesses. The introduction of a two part action trigger will have the effect of significantly decreasing the number of jobs small businesses will need to address through a full ergonomics program or a quick fix. OSHA has also increased its estimates of many of the unit costs for activities required in response to comments from businesses of all sizes and SBA.

Many small businesses were concerned about would be the necessity of hiring consultants or ergonomic experts (which the standard does not require) (see, e.g., Exs. 30-2993, Tr. p. 15586, Exs. 30-3849, 30-3166, 30-4334, 30-3167, 30-2993, Tr. pp. 14934, 30-3231, Tr. pp. 16935-16936). OSHA has increased its estimate of the time that managers will need to understand how to implement ergonomics programs, but continues to believe that, with adequate training, ergonomic consultants will be needed for only 15 percent of all problem jobs.

Some commenters were concerned about the differing impact of the final

standard on large and small employers. "Smaller businesses unlike large corporations do not maintain positions for health and safety officers \* \* \* many small businesses will be forced to obtain consultations and assistance from an outside firm" (Tr. pp. 9195-9196). Or that small businesses "do not have means to hire" experts such as ergonomists, engineers, and doctors (Tr. pp. 9258-9259), a statement that was repeated by many commenters from small businesses. Many small businesses also stated that the complexity of the standard and specialized skills necessary for job hazard analysis or job controls would make compliance difficult. "The vast majority of small businesses \* \* \* lack the safety and health expertise necessary to interpret the complex standard" (Ex. 30-4843). Other commenters found the standard and ergonomics too technical, too complex, or beyond their abilities (e.g., Exs. 30-4334, 30-1545, Tr. pp. 12770-12771, 15564-15566). OSHA agrees that the standard may have greater impacts on small businesses than on large businesses. However, as Chapter VII of the final economic analysis demonstrates, the standard is economically feasible even for very small businesses and will reduce significant risk to small entity employees. Furthermore, in the long run, the standard will lead to significant reductions in the costs of workers' compensation and other injury related costs for many small employers.

In terms of the regulatory approach of the proposal, some small business commenters urged the Agency to provide a specification type of standard. "Small businesses \* \* \* often cannot deal with that type of flexibility [referring to controlling hazards] and so prefer certainty" (Tr. pp. 6202-6206). "What OSHA failed to do in the proposed standard is give the specific steps that a small business owner must take to prevent MSDs. The proposed standard only gives small businesses a process for how they should develop their own solutions to the MSD problem" (Ex. 30-1897). "Small businesses prefer certainty which rule [sic] unfortunately does not provide" (Tr. pp. 6202-6206). In developing the final rule, OSHA has tried to retain the flexibility that will reduce costs to many small employers, while adding clarity to many provisions. Particularly the use of the screen as part of the action trigger and the optional safe harbors for determining compliance should significantly simplify compliance for the small employer.

<sup>3</sup> The Regulatory Flexibility Act states that a Regulatory Flexibility Analysis need not contain all of the above elements *in toto* if these elements are presented elsewhere in the documentation and analysis of the rule. The Regulatory Flexibility Analysis should, however, summarize where these elements can be found elsewhere in the rulemaking record.



3. *An estimate of the number of small entities affected by the final standard.* OSHA estimates that there are 4.75 million small establishments in general industry affected by the rule. The final standard covers an estimated 4.2 million

very small entities (*i.e.*, those employing fewer than 20 employees).

4. *Reporting, recordkeeping, and other compliance requirements of the rule, including an estimate of the classes of small entities which will be subject to the requirements and the type of professional skills necessary for the*

*preparation of the report or record.* Table VII-6 summarizes the compliance requirements of the rule, which types of small entities they apply to, the expected burden requirements, and the types of professional skills needed.

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**Table VIII-6. Estimates of Managers' and Employees' Time To Comply with Various Provisions of the Final Rule and Comparisons with the Estimates of Time Needed for these Activities for the Proposed Rule**

Provision	When Required		Hours or Costs Involved		Level of Staff or Expertise Required (Both proposed and final rules)
	Final Rule	Corresponding Proposed Provision	Final Rule	Corresponding Proposed Provision	
Costs to determine if establishment is within the scope of the standard, and if so, whether it can qualify for grandfather status	Costs to determine if establishment is within the scope of the standard, and if so, whether it can qualify for grandfather status	Costs to determine if establishment is within the scope of the standard, and if so, whether it can qualify for grandfather status	2 hours	1 hour	Manager
Cost to familiarize employer with the standard's initial requirements, determine hazard awareness information needed, set up reporting system, post information, and set up report response system	Cost to implement proposed hazard information and reporting requirement (designating responsible persons, providing resources, etc.)	Cost to implement proposed hazard information and reporting requirement (designating responsible persons, providing resources, etc.)	4 hours	3 hours	Manager